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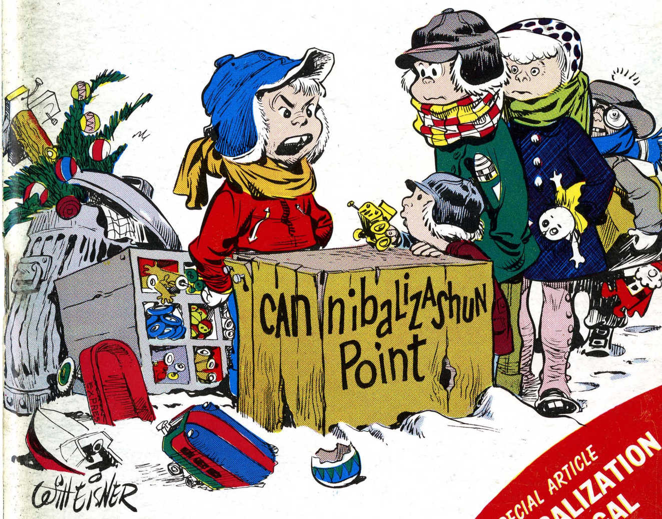
Issue 96
PS
1960 Series

THE PREVENTIVE MAINTENANCE MONTHLY


CANnibaliZashUN Point
EXPRESS
Will Eisner

Yeah, we got a wheel . . . where's yer DA Form 1546?

SPECIAL ARTICLE
CANNIBALIZATION IS LEGAL
SEE PAGE 29

WHAT'S WITH

Every time Half-Mast or Connie goes out to see how maintenance in the units is going, there's one question that hits them every time:

"How official is PS?"

The guys really mean to ask: "Is PS an order?"

The answer is "No."

Here's the story in a nutshell: PS is published by the Department of the Army for information ... as it says on the opposite page: "for the information of organizational maintenance and supply personnel."

That does not make PS a directive.

The information in PS becomes directive and you've got to do what it says only when your major unit commander says it will be followed. (Some commanders have put out their word on just how PS is to be used in their own commands.)

You see, PS is published for information so that any outfit can use it to best fit its own needs to keep their equipment ready for combat. AR 750-5 says that every commander is responsible for keeping his equipment in top condition. So, if your major unit CO thinks that the info in PS will help his unit keep combat-ready,

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It might be helpful for you to know that every bit of information in PS is checked over by the heads of the Army's technical services or by the wheels in the Pentagon before it's printed. Every effort is made to be sure the dope is accurate and practical for your use.

It's all aimed at giving you a helping hand at getting your maintenance job done so your equipment will be ready to fight —any time.

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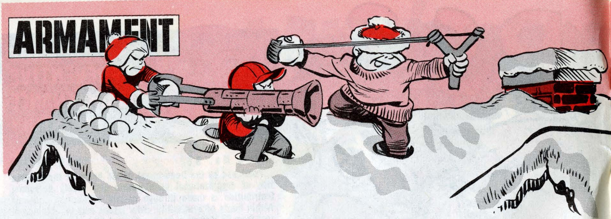
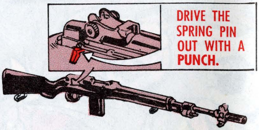


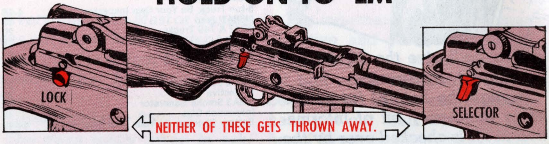
NO POINTS, PLEASE

When you go to take the M14 rifle apart . . . you want to believe what it says in TM 9-1005-223-12. And that sure goes for the "f" section under paragraph 65.

Use a punch to drive out the spring pin from the selector or selector lock. Don't use a nail—even in a pinch—unless the point's been filed away, leaving the face of the nail flat. The point of a nail'll chew the pin all up and spread the spring pin.



HOLD ON TO 'EM

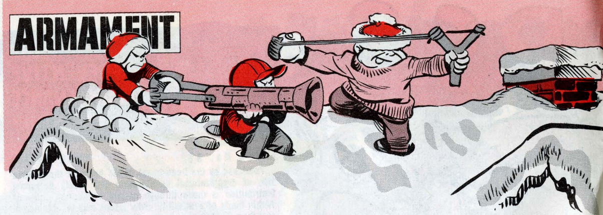


You Joes who have the M14 rifle for a shootin' iron . . . make sure you pass the word along.

When your company commander decides how many M14's he wants equipped with the selector for automatic firing, the supply sergeant gets the locks that're taken off the rifles by the armorer-artificer. The man in supply also holds on to the selectors that're not used. You do not toss away the locks that get taken off or the selectors that don't get used.

Every selector (and one comes with each M14) has to be accounted for. And comes the day when the "old man" wants more automatic fire . . . and there're some selectors missing . . . look out.

All the dope on installing the selector and removing the lock is in TM 9-1005-223-12.



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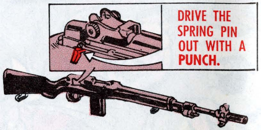

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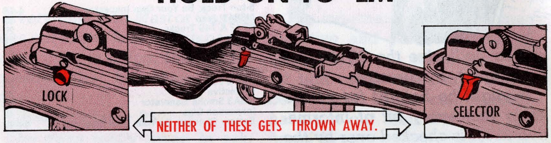

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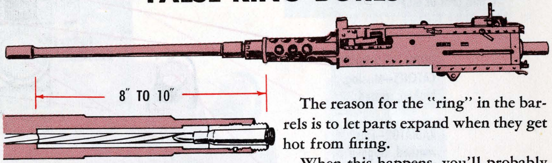
COULD I INTEREST YOU KIDS IN A FEW TIPS ON SMALL ARMS MAINT...

FALSE RING BORES



Are you .30 and .50-cal machine gunners being pestered with what look like ring bores in your barrels?

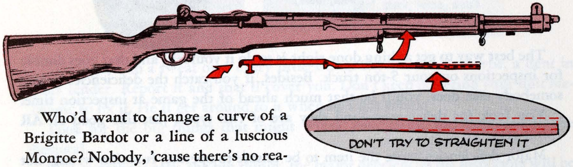
If you are, don't flip or worry about it 'cause that's the way they're made!

The reason for the "ring" in the barrels is to let parts expand when they get hot from firing.

When this happens, you'll probably see, at about 8 to 10 inches from the breech end, what looks to be a "ring."

If that's where you see the "ring," don't turn the barrel in for replacement 'cause it belongs there. Any other place . . . make tracks for your armorer-artificer.

THE CURVE'S OK



Who'd want to change a curve of a Brigitte Bardot or a line of a luscious Monroe? Nobody, 'cause there's no reason for it. Those curves are OK as is.

The hands-off deal also goes if you're thinking about the operating rod of your M1 rifle. It's got a slight bend not far from the end, something like the bow of a fiddle, and it's there for a purpose. It helps rotate the clip latch and eject the cartridge clip the right way.

So, don't bend it or twist it or try to resist it—just leave it as is. If you're still in doubt, have your armorer-artificer take a squint at it.

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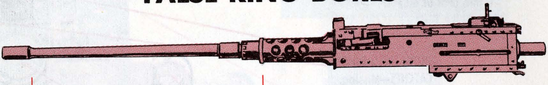

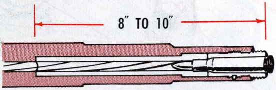

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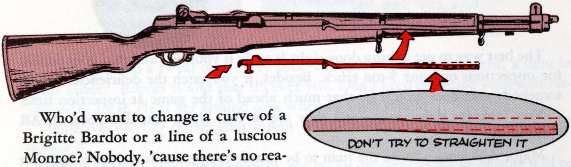

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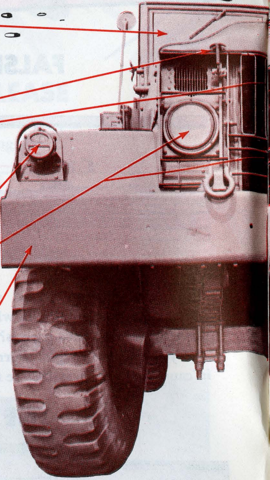
BE YOUR OWN INSPECTOR ON—YOUR 5 TON



HOOD—**Safety fastener catch missing, won't work.** (When working with the hood open, the safety fastener catch **must** be used.) Hinges and fasteners missing, broken, rusted. (Should have a thin coat of oil.)

HOOD HOLD DOWN CATCHES—Missing, broken, rusted.

RADIATOR—Fins mashed, clogged with insects, signs of leaks.

HEADLIGHTS & BLACKOUT LIGHTS—**Not working.** Lenses **cracked, painted over,** clouded, dirty, contain water, blackout shield missing, not in place.

BUMPERS—Badly bent, loose, cracked.

The best way to get a thing done right is to do it yourself, and that goes double for inspections on your 5-ton truck. Besides, if you catch the deficiencies before somebody else does, you'll be that much ahead of the game at inspection time.

You look for deficiencies—and they are of two types, just like good ol' AR 750-8 says.

Major deficiencies cause the item to be unsafe to operate, function wrong, not to operate or cause further damage if you go ahead and operate.

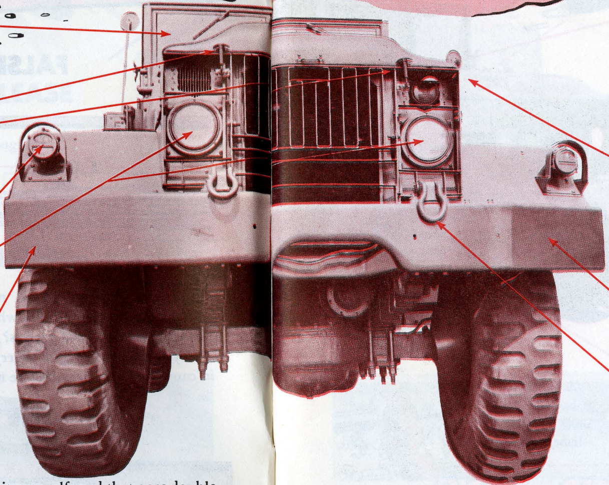
On 'tuther hand, the AR calls a minor deficiency one that won't cause immediate or later breakdown or endanger the safe operation of your truck.

You correct major deficiencies **right now**, or, if possible, yesterday.

You have to use your head on this deficiency business. After all, you're the one in the driver's seat.

BE YOUR OWN INSPECTOR ON— YOUR 5 TON TRUCK

DUNNO! MUST BE POST CAROLEERS I GUESS.
WHO ARE THOSE GUYS?



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GENERAL VEHICLE APPEARANCE—Dirty, rust spots, body dents. Welds pulled loose.

HOOD SIDE PANELS—Hinges rusted broken, latches broken, do not catch.

NATIONAL & UNIT MARKINGS—Missing, not legible. (AR 746-2300-1 gives you all the dope on this.)

LIFTING SHACKLES—Missing, bent, stuck, loose, won't swivel, cotter pin missing.

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Look for the big things that might wreck your truck and land you in the hospital.

Just to make it easy, the big things, the major deficiencies the inspectors will be looking for, are in **bold type.**

Mainly this is about Cargo Truck M41, but if you have any of the other members of the family, that fall in the G744-series, this'll put you on the right track.

In making your inspection it's a good idea to follow a set order so you don't miss anything. Start from the left front and go all around the vehicle, checking as you go.

TRUCK

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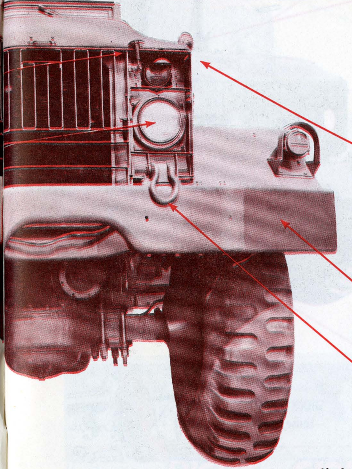

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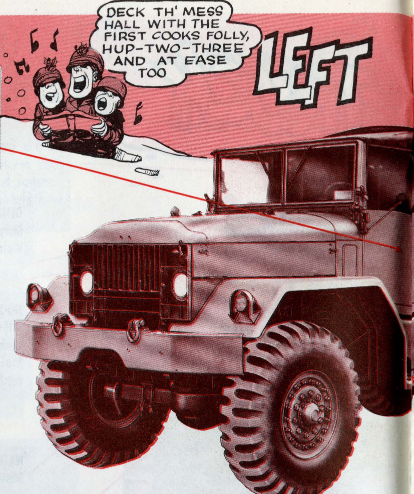
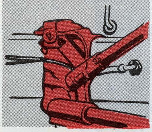
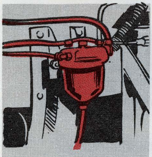
DOORS—Won't open and close right. Hinges loose, broken, missing. Weather-stripping missing. Drain holes clogged. Windows broken, badly cracked.


DECK TH' MESS HALL WITH THE FIRST COOKS FOLLY, HUP-TWO-THREE AND AT EASE TOO
LEFT

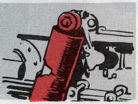
DRAG LINK RELAY LEVER BRACKET—**Cracked or broken,** loose.

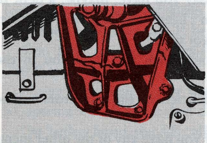




FUEL FILTER—Water, dirt in metal bowl.

SHOCK ABSORBERS —Loose, broken.





STEERING GEAR MOUNTING BRACKET—**Cracked or broken.** (This shows first as a hairline around the rivets.)

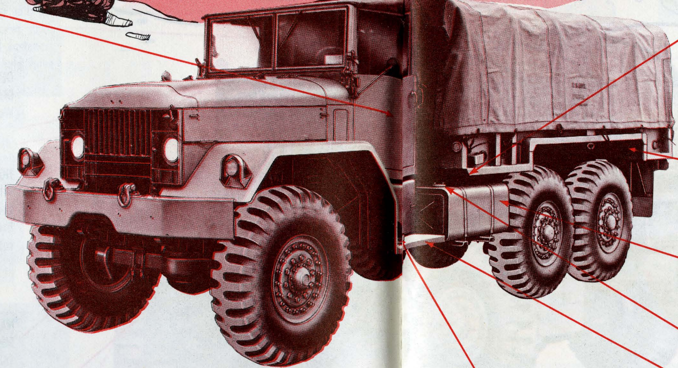
TOOLS AND EQUIPMENT

BASIC TOOLS, special purpose tools and equipment, and repair parts for the G744-series truck are listed in Change 5 (17 Nov 59) and change 6 (7 Mar 60) to TM 9-8028 (13 June 55).

DECK TH' MESS HALL WITH THE FIRST COOKS FOLLY, HUP-TWO-THREE AND AT EASE TOO

LEFT SIDE

I'LL MOIDER EM... WAIT UNTIL CHOW TIME...



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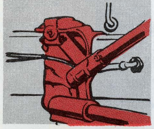

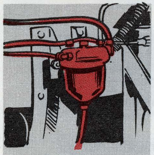

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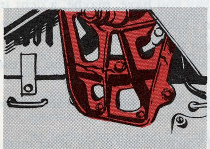

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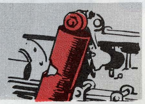

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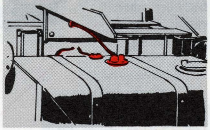
FUEL LEVEL SENDING UNIT—**Gas line crushed. Unit connector crushed.** Wire broken.



REFLECTORS—Missing, dirty broken, cracked. Backing peeled beyond half an inch. (Two yellow reflectors to the front of the vehicle and two red reflectors to the rear on each side.)

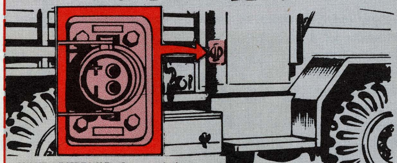
GAS TANK—**Leaking, support straps loose.** Gas level too high. (Must be at least 2 inches below top of tank.)

GAS CAN BRACKET—Straps worn out, missing.

RUNNING BOARDS—Bent, mounting boards loose.

GAS CAP—Chain missing. Valve should be in open position except when fording. Gasket missing, torn. See TB Ord 626 (1 Oct 57).

RIGHT SIDE

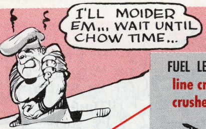


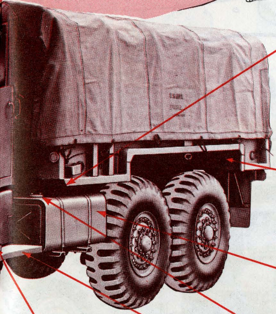
SLAVE RECEPTACLE—Cover missing, contacts, burned beyond use.

PIONEER BRACKETS—Not attached. No straps. Tools missing.

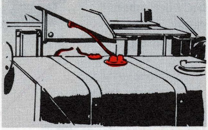
TOOL COMPARTMENT—Rusted, dirty, missing tools.

SIDE


I'LL MOIDER EM... WAIT UNTIL CHOW TIME...



FUEL LEVEL SENDING UNIT— **Gas line crushed. Unit connector crushed.** Wire broken.



REFLECTORS—Missing, dirty broken, cracked. Backing peeled beyond half an inch. (Two yellow reflectors to the front of the vehicle and two red reflectors to the rear on each side.)

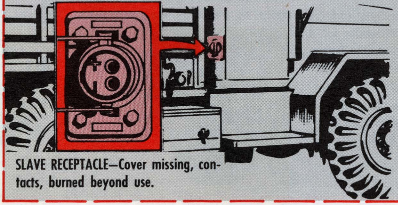
GAS TANK— **Leaking, support straps loose.** Gas level too high. (Must be at least 2 inches below top of tank.)

GAS CAN BRACKET—Straps worn out, missing.

RUNNING BOARDS—Bent, mounting boards loose.

GAS CAP—Chain missing. Valve should be in open position except when fording. Gasket missing, torn. See TB Ord 626 (1 Oct 57).

RIGHT SIDE

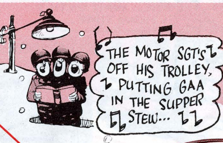


PIONEER BRACKETS—Not attached. No straps. Tools missing.

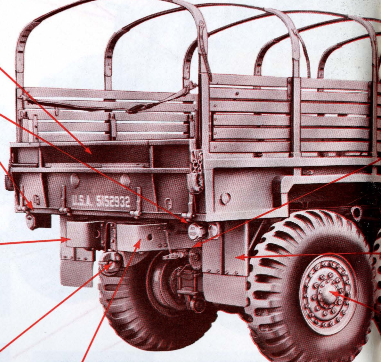
TOOL COMPARTMENT—Rusted, dirty, missing tools.

SLAVE RECEPTACLE—Cover missing, contacts, burned beyond use.

BOTH SIDES

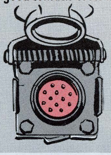

THE MOTOR SGT'S OFF HIS TROLLEY, PUTTING GAA IN THE SUPPER STEW...

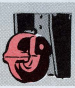
TAIL GATE—Broken, badly bent, chains missing. Chain covers missing.



REAR LIGHTS—**Not working. Lenses broken,** cloudy, dirty. Reflectors missing.

TRAILER COUPLING RECEPTACLE—Male coupling prongs will not make good contact. Cover missing.



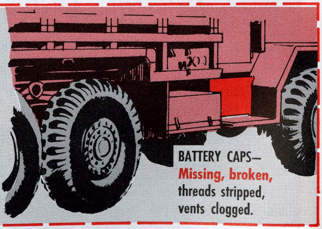


PINTLE—Can't be opened. Loose, not lubed. Spring broken.

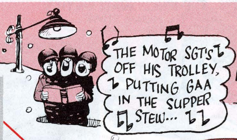
BUMPERETTES—Badly bent, loose, rusty, broken, bolts missing.

BATTERIES

BATTERIES—Check specific gravity of each cell with hydrometer from second echelon kit. A reading of less than 1.225 means battery needs recharging. If water level is less than ¾-in above separators, add distilled or drinking water. Do not overfill. Both batteries should be installed with positive (+) terminals facing toward front of truck.

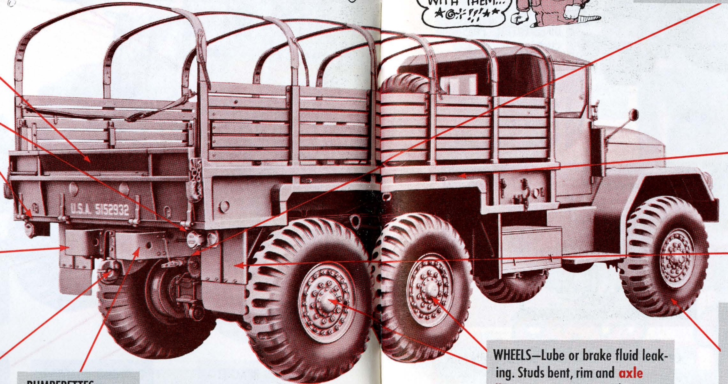


BATTERY CAPS—**Missing, broken,** threads stripped, vents clogged.


THE MOTOR SGT'S OFF HIS TROLLEY, PUTTING GAA IN THE SUPPER STEW...

BOTH SIDES AND REAR

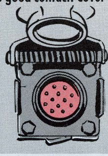
GRRR... WHEN I GET THROUGH WITH THEM... *@!!*

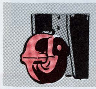


TAIL GATE—Broken, badly bent, chains missing. Chain covers missing.

REAR LIGHTS—**Not working. Lenses broken,** cloudy, dirty. Reflectors missing.

TRAILER COUPLING RECEPTACLE—Male coupling prongs will not make good contact. Cover missing.

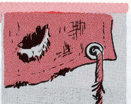




PINTLE—Can't be opened. Loose, not lubed. Spring broken.

BUMPERETTES—Badly bent, loose, rusty, broken, bolts missing.

TRAILER BRAKE COUPLINGS—Chain broken or missing. Rubber seal missing or rotted. (Check both service and emergency outlets.)



CANVAS—Torn, mildew. Ropes and straps missing, broken, torn.

TARP HOOKS—Missing, badly bent, rusted, loose.

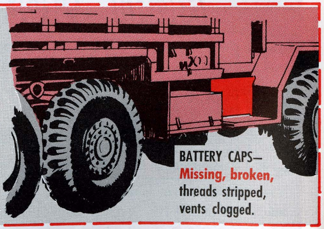
MUD FLAPS—Missing, loose, bolts missing, torn.

TIRES—Tire treads dangerously worn, cut to fabric, unevenly worn. Incorrect tire pressure. (Correct tire pressure for all conditions on page 108 of TM 9-8028. See also TM 9-1870 on care of tires.) Valves bent. Valve caps missing.

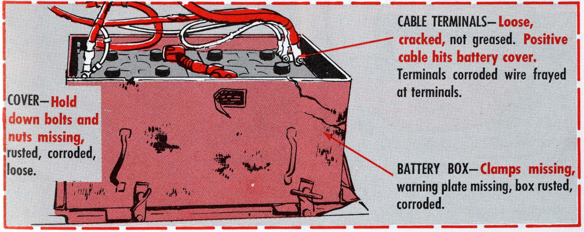
WHEELS—Lube or brake fluid leaking. Studs bent, rim and **axle flange nuts missing,** loose.

BATTERIES AND BOX

BATTERIES—Check specific gravity of each cell with hydrometer from second echelon kit. A reading of less than 1.225 means battery needs recharging. If water level is less than ¾-in above separators, add distilled or drinking water. Do not overfill. Both batteries should be installed with positive (+) terminals facing toward front of truck.



BATTERY CAPS—**Missing, broken,** threads stripped, vents clogged.



CABLE TERMINALS—**Loose, cracked,** not greased. **Positive cable hits battery cover.** Terminals corroded wire frayed at terminals.

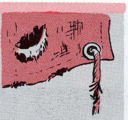
COVER—**Hold down bolts and nuts missing,** rusted, corroded, loose.

BATTERY BOX—**Clamps missing,** warning plate missing, box rusted, corroded.

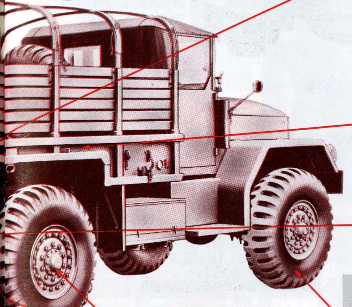
AND REAR

GRRR... WHEN I GET THROUGH WITH THEM... ★@✱!!★★

TRAILER BRAKE COUPLINGS—Chain broken or missing. Rubber seal missing or rotted. (Check both service and emergency outlets.)



CANVAS—Torn, mildew. Ropes and straps missing, broken, torn.



TARP HOOKS—Missing, badly bent, rusted, loose.

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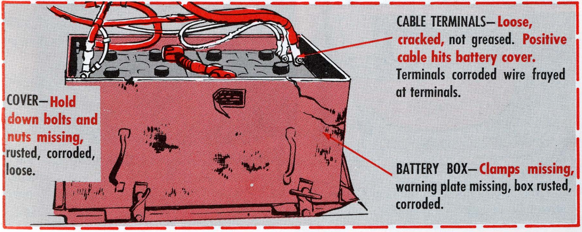
AND BOX



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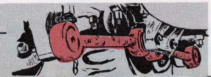
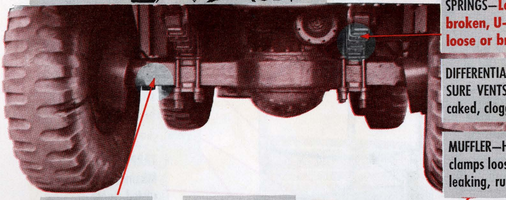
UNDERNEATH



TORQUE RODS—Bent or loose.



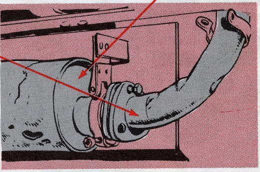
SPRINGS—**Leaves broken, U-bolts loose or broken.**

DIFFERENTIAL PRESSURE VENTS—Mud caked, clogged.

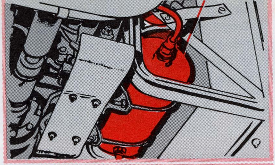
FRAME—Bent, cracked. Side rails and cross members loose.

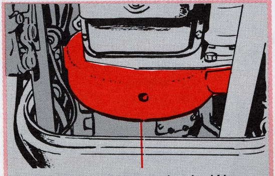
MUFFLER—Holes, clamps loose, leaking, rusted out.

TAIL PIPE—Broken, clogged, badly dented, clamps loose, rusted out.



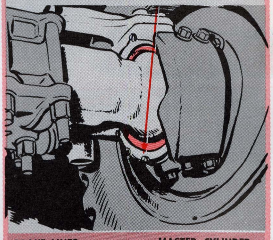
AIR BRAKE RESERVOIR—**Drain cock stuck, handle broken off.** Tanks should be opened and water drained after each day's operation.





FLYWHEEL HOUSING—Drain plug should be out except for fording.

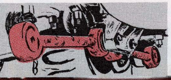
CV JOINT HOUSING—Rusted. Boot so badly torn that joint is exposed.



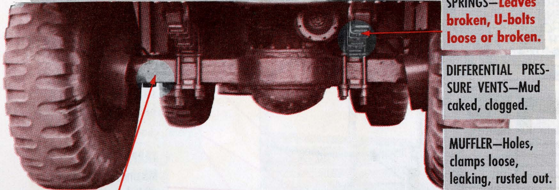
BRAKE LINES, CONNECTIONS—Not clamped, bent, leaking **fluid.**

MASTER CYLINDER—**Fluid leaking, loose.** Boot torn, leaks.

UNDERNEATH VEHICLE



TORQUE RODS—Bent or loose.



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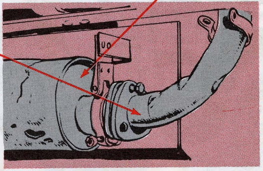

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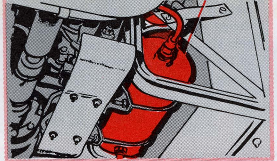

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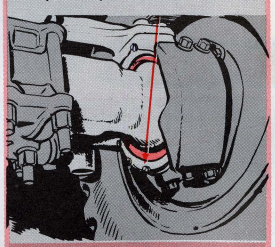
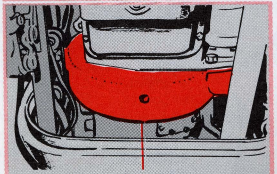


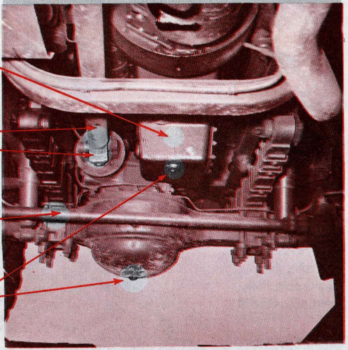


FLYWHEEL HOUSING—Drain plug should be out except for fording.

BRAKE LINES, CONNECTIONS—Not clamped, bent, leaking **fluid.**

MASTER CYLINDER—**Fluid leaking, loose.** Boot torn, leaks.

TRANSMISSION—Right lube level. Lube leaks. (See LO for level.)



ENGINE OIL PAN—**Plug leaking, bolts loose, pan gasket leaks.**

SHAFTS & UNIVERSAL JOINTS—Bolts or shafts loose, badly worn seals and joints.

TIE ROD—Bent, end loose, worn.

DRAIN PLUGS—Loose, leaking. Check all three differentials for lube leaks. (Don't confuse a seep for a leak.)

CARGO COMPARTMENT

TARP BOWS—Broken, missing.

SPARE TIRE HOLDING BOLTS—Missing or rusted. Nuts missing. Bolts missing.

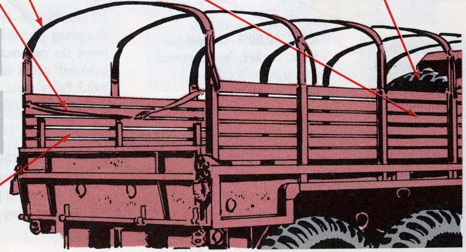
SPARE TIRE—Missing, incorrect pressure. Not secured by all three holding bolts.

CANVAS SAFETY STRAP—Missing, broken, bolts or eyes missing.

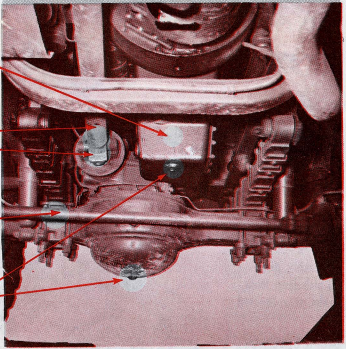
FLOOR—Holes, floor plates bent.

PAULIN (if supplied)—Missing, torn, mildewed.

SEATS & RACKS—Missing, wood broken, racks rusted.



VEHICLE



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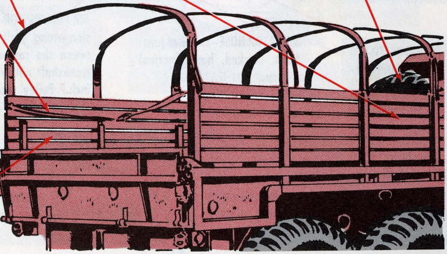

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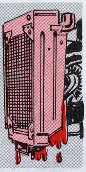
UNDER THE

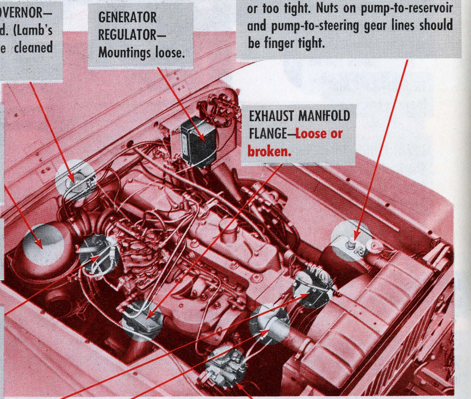


RADIATOR—**Leaks through body at hose clamps.** (Should not be filled above level of coolant cock.) Coolant cock rusted, will not turn. **Radiator cap missing,** chain missing, cap not secured to chain.

HYDRAULIC STEERING RESERVOIR—Level wrong. (Should be 1/4 inch above bottom of filler screen.) Tanks rusted, connections loose, **leaks.** Wing nuts, too loose or too tight. Nuts on pump-to-reservoir and pump-to-steering gear lines should be finger tight.

AIR COMPRESSOR GOVERNOR—Strainer dirty, clogged. (Lamb's wool pad should be cleaned and oiled.)

GENERATOR REGULATOR—Mountings loose.



CARBURETOR AIR CLEANER—Dirty, oil cup empty, dirt over 3/8 inch deep. Hose, leaks, not connected

EXHAUST MANIFOLD FLANGE—**Loose or broken.**

ENGINE GOVERNOR SEAL WIRE—Missing or broken.

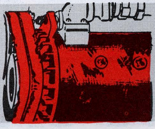
CHOKE WIRE—Broken or loose. Adjusted wrong for choke and open position of butterfly.

AIR COMPRESSOR—Leaks. Drive belt tension wrong. (Belt deflection halfway between the compressor pulley and the crankshaft pulley ought to be one-half inch.) Pulley loose. Noticeable crankshaft end play, leaks air.

RADIATOR-TO-ENGINE-SUPPORT-RODS—Missing, loose, rusted.

RADIATOR HOSE—Leaks at junctions, cracked, has abnormal soft spots.

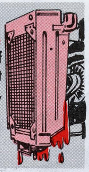
FAN BELTS—**Badly frayed.** Wrong adjustment. (Belt deflection halfway between fan and generator pulleys should be one-eighth to one-quarter inch.) Replace belts in pairs.



GENERATOR—**Connections loose,** body rusted. Pulley loose, inspection plug frozen. **Mounting bolts loose.**

UNDER THE HOOD

RADIATOR—**Leaks through body at hose clamps.** (Should not be filled above level of coolant cock.) Coolant cock rusted, will not turn. **Radiator cap missing,** chain missing, cap not secured to chain.



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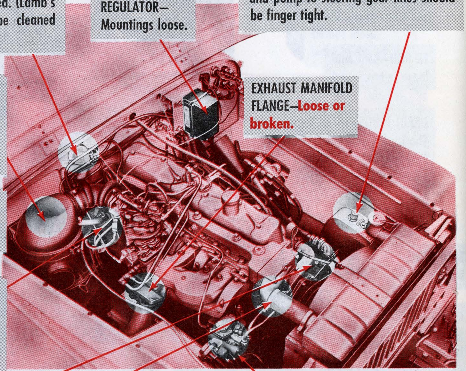

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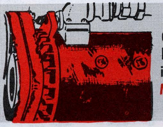


GENERATOR—**Connections loose,** body rusted. Pulley loose, inspection plug frozen. **Mounting bolts loose.**

DON WE NOW OUR HELMET LINERS... GUARD DUTY CALLS, GET ON THE BALL, HUP TWO-THREE

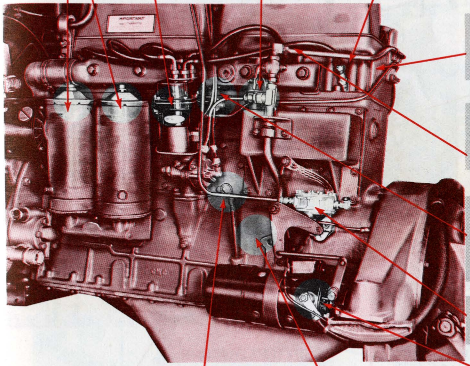
WATER PUMP—Leaks at gasket. Shaft loose. Bearing seal leaking.

DISTRIBUTOR—Cracked, dirty, cables loose. Wrong type. (Should be Delco Model 1111561.)

SPARK PLUGS—Loose, corroded. Not all the same heat range. Should be all; Hot Plugs FSN 2920-835-7724 or Cold Plugs FSN 2920-752-4258 (See TM 9-8638 Dec 56).

OIL FILTERS—Leaks.

FORDING CONTROL CABLES—Broken, valve rusted shut or or open (valve must be in verticle position when not fording.)



CYLINDER HEAD—**Compression or water leaks.**

SPARK PLUG CABLES—Loose, badly frayed or worn.

WIRES & CONNECTIONS—Loose, badly frayed or worn.

FUEL PUMP—**Loose, leaks.**

STARTER MOTOR—Bracket loose. Connections, loose, dirty, rusted.

DIPSTICK—Wrong kind. Oily end should read, "Check Oil Level About One Minute After Stopping Engine—Do Not Screw In To Check Oil—Screw Tight After Checking Oil." Stick should have three oil levels and measure $19\frac{11}{16}$. The correct kind is FSN 6680-737-6338.

CRANKCASE OIL—Level too low. (Shouldn't be lower than 1 qt below top full mark.) Too high. (Shouldn't be over $\frac{1}{8}$ inch above top full mark.) Cap missing, damaged.

HOOD

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GUARD DUTY CALLS, GET ON THE BALL, HUP TWO-THREE

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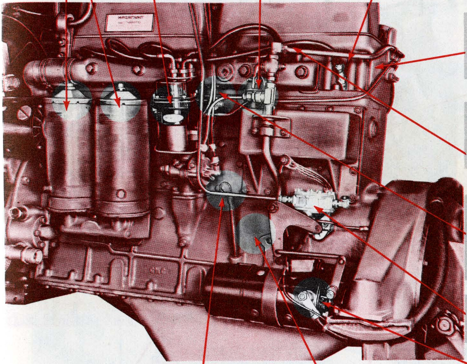
OIL FILTERS—Leaks.

FORDING CONTROL CABLES—Broken, valve rusted shut or or open (valve must be in verticle position when not fording.)

SPARK PLUGS—Loose, corroded. Not all the same heat range. Should be all; Hot Plugs FSN 2920-835-7724 or Cold Plugs FSN 2920-752-4258 (See TM 9-8638 Dec 56).



CYLINDER HEAD—Compression or water leaks.

SPARK PLUG CABLES—Loose, badly frayed or worn.

WIRES & CONNECTIONS—Loose, badly frayed or worn.

FUEL PUMP—Loose, leaks.

STARTER MOTOR—Bracket loose. Connections, loose, dirty, rusted.

DIPSTICK—Wrong kind. Oily end should read, "Check Oil Level About One Minute After Stopping Engine—Do Not Screw In To Check Oil—Screw Tight After Checking Oil." Stick should have three oil levels and measure 19$\frac{11}{16}$. The correct kind is FSN 6680-737-6338.

CRANKCASE OIL—Level too low. (Shouldn't be lower than 1 qt below top full mark.) Too high. (Shouldn't be over $\frac{1}{8}$ inch above top full mark.) Cap missing, damaged.

MIRRORS—Missing, broken, dirty or obstructed, clouded enough to block rear view vision, can't be adjusted for movement in every direction.

SING THE G.I. YULE TIDE CAROL WE'LL RE-UP IN SIXTY THREE...
IN THE

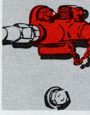
REAR WINDOW—Fogged enough to hamper vision.

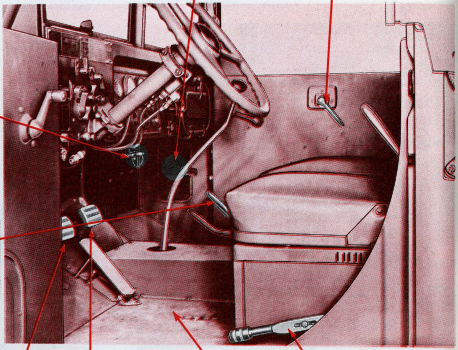
DEGASSER—Not connected. Fails to stop engine. Causes rough idle.

VENTILATORS—Rusted, won't work. Lever broken or bent.

DOOR HANDLES—**Missing, broken,** loose. Door won't stay shut.

AIR SUPPLY VALVE—Won't work, leaks, cap missing.





PTO LEVER—Stuck or bent. Must be disengaged before driving truck.

CLUTCH—Free play wrong. (Should be $1\frac{3}{4}$ inch to 2 inches.) Chatters, slips.

MASTER BRAKE CYLINDER—Fluid level too low. (Should be $\frac{1}{2}$ inch below filler cap opening.)

BRAKE PEDAL—**Won't work.** Too much free play (Should be $\frac{1}{2}$ inch) Grabs. Spongy pedal action. (Shows hydraulic system needs bleeding.)

HAND BRAKE—**Inadequate.** (Should be able to hold truck on reasonable grade with one-third reserve hand lever travel.)

IN THE CAB

SING THE G.I. YULE TIDE CAROL WE'LL RE-UP IN SIXTY THREE...

LET 'EM SING... IF THIS SNOW KEEPS UP THEY'LL BE BURIED FOR SURE.
GUESS YOU'RE RIGHT, SYLVESTER

MIRRORS—Missing, broken, dirty or obstructed, clouded enough to block rear view vision, can't be adjusted for movement in every direction.

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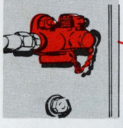

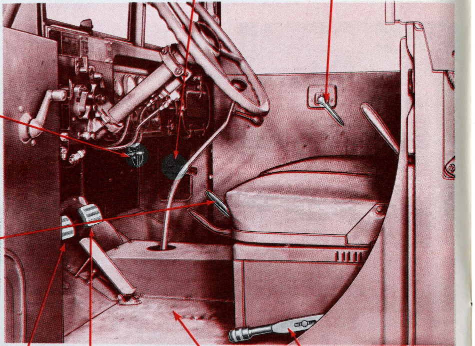

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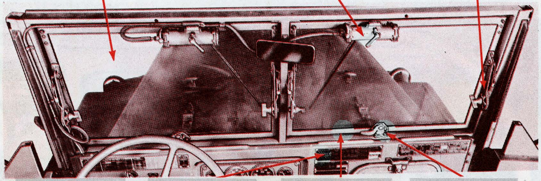
HAND BRAKE—**Inadequate.** (Should be able to hold truck on reasonable grade with one-third reserve hand lever travel.)

WINDSHIELD—Crack longer than 2 inches. Badly discolored, clouded enough to block driver's vision.

WINDSHIELD WIPER—Blades missing or won't work right. Wiper motors don't work. Wiper blade arm not secure on shaft.

WINDSHIELD TILT ADJUSTER—Missing, rusted, won't open

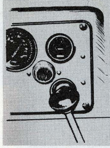


SEATS—Cushions torn. Seat adjustment will not work.

DATE & CAUTION PLATES—Missing, painted over, can't be read

WINDSHIELD CHANNELS—Rusted, glass loose.

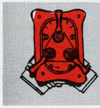
WINDSHIELD INNER FRAME LOCK—Missing, rusted, won't work.



FORDING CONTROL LEVER—Rusted, does not operate freely.

CHOKE CONTROL—Does not work freely.

JINGLE BELL CRANKS, JINGLE BELL CRANKS



LIGHT SWITCHES—**Broken, won't work.** Dimmer switch broken. Light on dash doesn't work.

MAP COMPARTMENT—Latch broken. Does not have right pubs: LO, TM, SF 91, DD Form 518. (See data plate.) Flywheel drain plug not present.

CAB
LET 'EM SING... IF THIS SNOW KEEPS UP THEY'LL BE BURIED FOR SURE.
GUESS YOU'RE RIGHT, SYLVESTER

WINDSHIELD—Crack longer than 2 inches. Badly discolored, clouded enough to block driver's vision.

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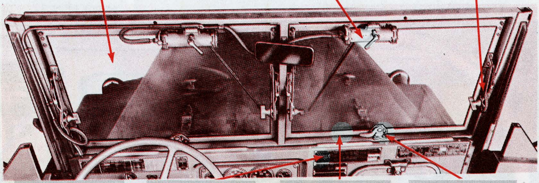

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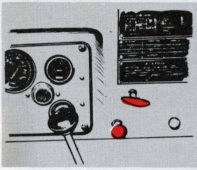

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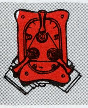

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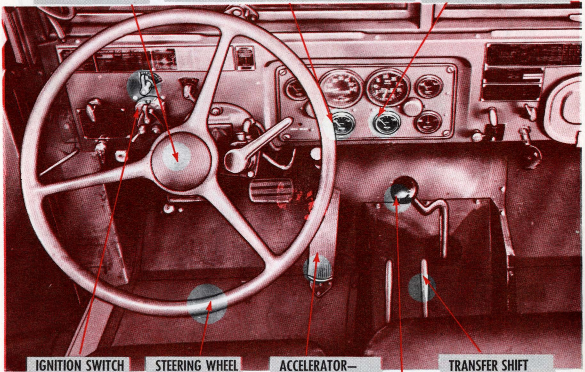
START TRUCK MOTOR



ENGINE—Listen for unusual noises, note stalls, misfires, overheating.

HORN BUTTON—Won't work. Loose.

AIR PRESSURE GAGE—**Improper pressure.** Needle should travel from 0 to 120 PSI within 10 minutes with your engine running at about 1000 RPM. **Pressure fades too fast.** With air pressure at maximum, 120 PSI, stop engine. There should be no drop in pressure within one minute. Operate brake to reduce air pressure. Compressor should start when pressure reaches 105.

HEATER (where supplied)—Not working. Hoses not connected to defroster ducts leaks.

OIL PRESSURE GAGE—**Below normal reading.** (Should be 15 PSI with engine idling.)

IGNITION SWITCH—**Broken,** loose.

STEERING WHEEL—Check for free play, wander, shimmy, **pull.**

ACCELERATOR—**Sticks,** loose, boot missing or torn.

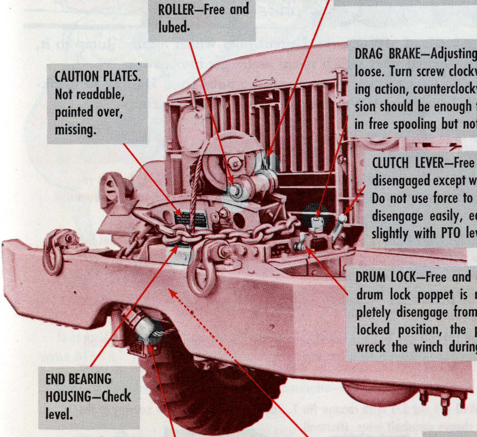
TRANSFER SHIFT LEVER—Stuck, loose, bent. (Check while driving.)

AIR PRESSURE—Buzzer—Warning buzzer should sound when operating pressure falls below 65 PSI.

PANEL INSTRUMENTS & GAGES—Don't work right (See TM 9-8028 paras 14-43.) Lenses broken, cracked, clouded.

TRANSMISSION GEARSHIFT LEVER—**Sticks, jumps out of gear.** Knob missing. Boot torn.

FRONT WINCH



GASKET JOINTS, OIL SEALS, PLUGS—Check lube leaks. Tighten all bolts, screws, nuts and plugs where it leaks.

CASE & COVER—Check for cracks.

WINCH CABLE—Dirty, dry (oil with crankcase oil every time it's used). Strands broken. (Replace if over 20 per cent of strands broken.) Rusty, kinked, loosely wound on drum, cross wound. Secured wrong on drum.

ROLLER—Free and lubed.

CAUTION PLATES. Not readable, painted over, missing.

DRAG BRAKE—Adjusting screw too tight, too loose. Turn screw clockwise to increase braking action, counterclockwise to decrease. Tension should be enough to control winch drum in free spooling but not under load.

CLUTCH LEVER—Free and lubed—Be sure it's disengaged except when winch is in operation. Do not use force to disengage. If it does not disengage easily, ease up on drum tension slightly with PTO lever.

DRUM LOCK—Free and adjusted right. (If the drum lock poppet is not adjusted to completely disengage from the drum in the unlocked position, the poppet can jam and wreck the winch during operation.)

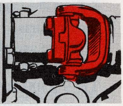
END BEARING HOUSING—Check level.

AUTOMATIC BRAKE—Fails to hold, overheats. Should hold a weight on a downhill pull equal to the weight of the truck. For adjustment . . . to increase braking action, turn adjusting bolt half a turn clockwise. But, if brake cover becomes so hot you can't hold your hand on it, the brake is too tight. Back off the adjusting bolt, as needed. Take off brake case inspection cover to look for rust inside automatic brake; that is the biggest single hazard with truck winches.

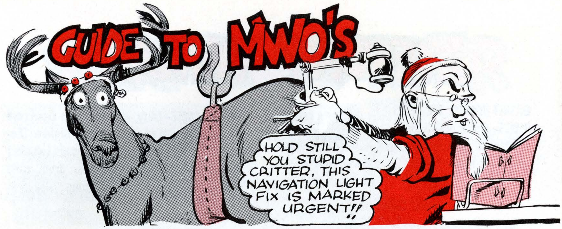
GEAR CASE—Right oil level.

SHEAR PIN—Should be aluminum, not steel. (Test with magnet). Should not be frozen in shaft. (Test with finger for free play.)

UNIVERSAL JOINT—Corroded. Universal joint yoke and winch drive rusted together destroy the safety value of the shear pin. Not lubed.



GUIDE TO MWO'S


HOLD STILL YOU STUPID CRITTER, THIS NAVIGATION LIGHT FIX IS MARKED URGENT!!

There are two kinds of MWO's, the **Urgent** ones which mean, "Jump to it, daddy," and the **Normal** ones which mean 'don't get into a sweat."

Just so you won't have to look through all the pubs from Halifax to breakfast, here are all the current MWO's for the 5-ton M-series trucks.

MWO Ord G744-W16 (5 Nov 54) with Changes 1 and 2. Prevents transmission lubricant from entering clutch housing. (Urgent).

MWO 9-2320-211-30/3 (26 Sept 58) applies only to wreckers M62 and M246. Installs restrictor in power divider governor valve control valve-to-power divider governor valve vacuum line. (Urgent).

MWO 9-2320-211-20/2 (12 Feb 59) applies only to the Truck Chassis M139D. It requires the installation of a new name plate for truck chassis M139D equipped with the Rocket Launcher XM 289 to replace the M138C name plate. (Urgent).

MWO Ord GI-W104 (23 Apr 57). Alteration of wiring harness used with switch 7729684 to make it applicable to switch 7368702. (Normal).

MWO Ord GI-W109 (21 Oct 57). Provides an access opening in crane boom shipper. (Normal).

MWO 9-2320-211-30/1 (2 Sept 58). Covers the installation of an improved engine oil pump cover-to-float tube. (Normal).

MWO Ord G744-W40 (14 Oct 57) With change No 1. Deals with relocating the keyway in the front winch tension sheave camshaft lever. (Normal).

OTHER STUFF

The lubrication order for your trucks is LO 9-8028 (15 Aug 57). (Check DA Pam 310-4 to see if there's a later one.)

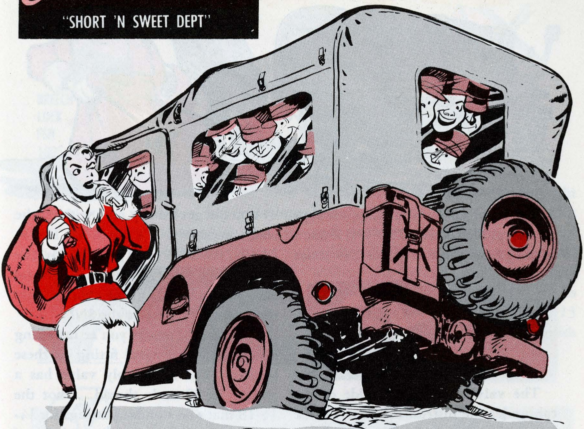
TM 9-8028 with changes 2, 4, 5 and 6 has a lot of solid information about the 5-ton G744-series trucks and TM 9-2320-211-20P lists first and second echelon repair parts.

There are also a number of TB 9's to which you might give a blow of the eye

TB 9-2320-211-20/1 (13 May 59) has all the dope on tailpipe extensions, while TB 9-2300-209-20 (11 June 59) has everything you will want to know on stowage locations for the cover and universal bracket assembly for the rifle.

Connie Rodd's

"SHORT 'N SWEET DEPT"



Snug jeep

Is it full protection you're after? Well, here are the facts and figures that'll get your M38A1 Jeep canvas doors, side curtains, and hardware, too!

To fix up your Jeep—if you don't need the hardware—ask for:

Curtain, door, left assy	FSN 2540-699-7035
Curtain, door, right assy	FSN 2540-699-7032
Curtain, side quarter, left	FSN 2540-699-7033
Curtain, side quarter, right	FSN 2540-699-7034

You would use these numbers only if you've had curtains before and don't need attaching hardware. If you need both the curtains and the attaching hardware, ask for Kit, canvas closure, FSN 2540-039-7803. It has all the curtains, doors and hardware to take care of one M38A1.

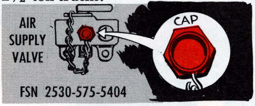
All you need, that is, if you still have the top rails that came with the Jeep. These were meant to last the life o' the vehicle and are not stocked for issue. Only way to get a new pair of top rails is to make 'em.

And o'course, if you need a new top, that's Cover, top w/rear curtain assy, FSN 2510-040-2558.

Cap on tap

Y'SURE Y'WON'T SETTLE FOR A REAR VIEW MIRROR OR SUCH?

Step right up for your Cap, air supply valve, FSN 2530-575-5404, if one's missing from those G742 or 749-series 2½-ton trucks.



The valve's on the left side of the cab under the instrument panel on the G749's, on both sides of early model G742's, but only on the right side of later models of the G742-series vehicles.

You can get the cap now without the entire assembly. It's listed in TM 9-2320-209-20P (8 Apr 59) for the G742's and also available as a separate item for the G749's even though only the assembly's listed in the SNL.

Look sharp, too, if you're installing a new air hose swivel fitting on these vehicles. The air supply valve has a special ½-20 male thread . . . not the ½-18 that's on standard fittings for ¼-in lines. Forcing on a standard-thread fitting would damage the valve's non-ferrous threads.

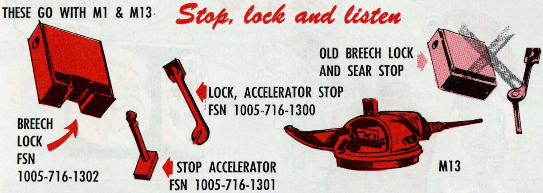
Soaked Seals

When you're installing new felt or leather oil seals in your equipment, they'll go easier and last longer if you soak 'em a while in oil.

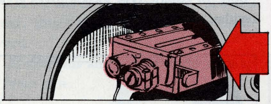
OE'll do it, unless it's in a hydraulic system where rubber parts make petroleum-base oils strictly no-go. Soak, drain, and install 'em and get a better seal right from the start.

If you're installing synthetic rubber seals, soaking's not needed. But you'll want to lube 'em plenty with oil, grease or the fluid that's being sealed in.

Stop, lock and listen


THESE GO WITH M1 & M13
BREECH LOCK FSN 1005-716-1302
LOCK, ACCELERATOR STOP FSN 1005-716-1300
STOP ACCELERATOR FSN 1005-716-1301
OLD BREECH LOCK AND SEAR STOP
M13

Everything wants to be just so if you're going to have a free-wheeling and dealing .50-cal machine gun in your M1 and M13 cupola.



And that means you need the right breech lock and accelerator stop lock and accelerator stop in the gun. Some old breech locks and sear stops are still making the rounds. And when they wind up in a weapon that rests on its side like the .50 in your M1 or M13 cupola, you get stoppages or sluggish action.

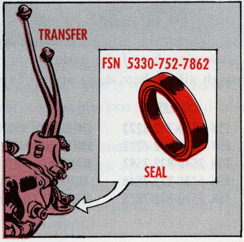
Drip Rub Out

Bothered by drips?

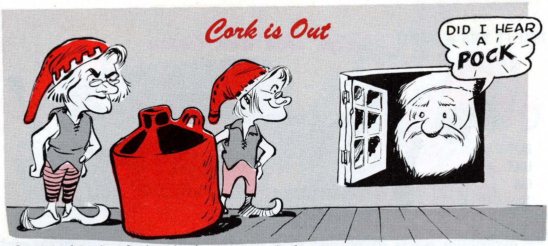
They're all around, but there's one your Ordnance support can help you rub out in a jiffy. It's the dripping oil that may be falling from the transfer on your Jeep.

It's done with a new seal—made to take care of drips on G740 and G758-series vehicles. Also on the G503's (GPW and MB) if any are still around.

This new drip stopper, just in case your support hasn't heard, is Seal, plain, encased, S or semi-rigid non-metallic case, spring loaded, 1.552 shaft dia, 2.506 OD, ½ w, FSN 5330-752-7862. It replaces the one with FSN 5330-286-6867 that'll now be used only in welding machines.

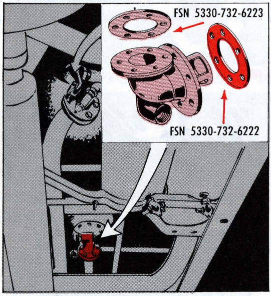

TRANSFER
FSN 5330-752-7862
SEAL

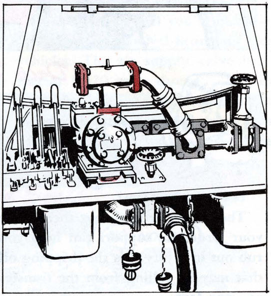
Cork is Out


DID I HEAR A POCK

Got a leakin' headache—in the valves, flanges, or pumps on your M49 or M49C, 1200 gallon, gasoline tankers?

No need to have, if they have the right gaskets and are kept good'n tight. If snugging them up don't stop the leaks then check see if the unit has a cork gasket. If it has, toss it out, and ask for a new gasket. The Garlock #660 "or equal" type gasket gives good results.

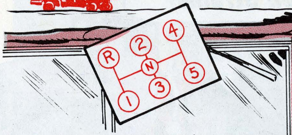




Below's a list of the gaskets you're allowed to replace on these units . . . even though all of them don't appear in your 20P's, they're still an authorized item.

GASKET	USED HERE	QTY
FSN 5330-732-6223	EMERGENCY VALVE TO DISCHARGE NOZZLE	3
FSN 5330-732-6222	EMERGENCY VALVE TO TANK	3
FSN 2540-832-7597	MANIFOLD GATE VALVE	8
FSN 5330-832-7848	PUMP OUTLET FLANGE (at pump) & INLET FLANGE (at strainer)	2
FSN 2510-832-7875	STRAINER TO PUMP AND TO STRAINER CAP	2

POWER TRAIN WINDUP

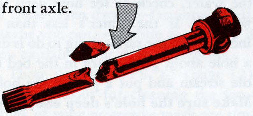


OH YEAH, AND WHAT SAYS I'M **NOT** IN THE RIGHT GEAR?

Pushing or pulling a G742-series 2½-ton vehicle without checking to see what gear it's in will get you a lot of grief.

It's never safe to pull, push or let it coast in a direction opposite to the gear the transmission lever's engaged in. If it's in REVERSE, don't push, pull or coast forward. If it's in any **forward gear**, don't push, pull or coast backward.

Forget this and you're likely to snap a front axle.



What causes the axle to snap is what's called power-train windup, described in para 77 of TM 9-8022 (17 Dec 54). Briefly, you get this windup because all but a few of the early M34's in this series have a double-sprag transfer that allows front-wheel freewheeling, in either forward or reverse gear, when rear wheel traction is normal.

This sprag is linked to the transmission. So—if the transmission is in a gear for the direction you're heading—it will shift automatically.

But if you're pushing, pulling or coasting in a direction opposite to the gear your transmission's in, your front power-train gets wound up like a clock spring 'cause the transfer sprag doesn't shift.

Here's how you can tell when you've got this windup:

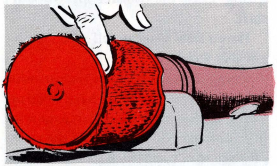
Going forward with the transmission in reverse, you'll run into hard steering. Going backward with the transmission in a forward gear, you'll find the transmission won't stay in REVERSE when you shift the lever there.

That's your clue to change your direction (forward or reverse) and keep going long enough to unwind the power-train. You'll need to travel at least as far as you just pushed, pulled or coasted.

If there's not enough space to do it, you'll have to jack up one front wheel to let the gears unwind. See the caution notes about this in paras 263b and 264b of TM 9-8022.

ICE FISHIN' CONNIE?
NO,... Strain On Strainer

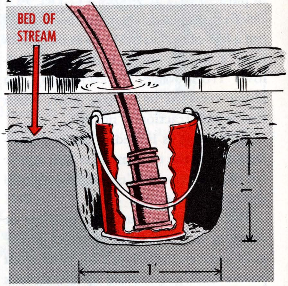
It shouldn't happen but sometimes it does to the best of the decons. And that is just throwing the intake hose and strainer into just any old stream without doing any checking of the strainer or the stream.



Before you do that there are some things to keep in mind. Dirt, gravel and gunk can damage the plunger cups and cause wear on valve, pump parts and hoze nozzles.

First off, check the strainer to make sure that it's in good condition. Don't just take a quick glance at it but pick it up and gently push around the edges. If there are rips, rusty places or weak places in the strainer, see that it's replaced before you use it.

And as to the stream, try to use the cleanest water possible. Before you put the water intake hose and strainer in the water, check to see how deep the water is. If the water's less than 6 inches deep, the safest thing to do is dig a hole about 1-ft square in the bed of the stream and put a pail in the hole. **Make sure the hole's deep enough so the top of the pail is below the water surface.** Then put the strainer in the pail.



MORE ABOUT...

Snow White and Helpers

You think maybe you've found one of those seven dwarfs—Grumpy. Well, maybe you can trade him for Happy if you explain about those detergents.

Those detergents PS #87 (page 12) told you about for cleaning the face-blank of your protective mask are simply new helpers for the scrub job.

WELL!! WOT ARE YOU WAITING FOR... START CLEANING.

A few people (and a couple of inspectors) got the idea that from now on mask cleaning would be done only with the tested detergents. That's not the story. The approved detergents are good hard-working cleaners, but they don't cancel out the soap-and-water cleaning method.

The detergents listed in PS were tested by the Chemical Corps and do a good cleaning job without harming the mask or the men. The only change in the cleaning procedure is that now you've got two ways to clean your mask. But be sure to rinse it thoroughly to rid it of soap or detergent.

Your CO can choose one of the tested detergents, or he can stick to the old-fashioned suds. He has the say as to which method you use.

Use of the detergents is authorized by Chemical Corps letter CMLAM-M-SYM, dated 13 May 1960, which got world-wide circulation. The information it gave should be in your area by now.

MORE ➡

HERE'S A LIST OF THE APPROVED DETERGENTS. YOU GET 'EM THROUGH LOCAL PURCHASE:

MAGNUS 1-DX MADE BY MAGNUS CHEMICAL CO., GARWOOD, N. J.
ARCTIC SYNTEX 036 MADE BY COLGATE-PALMOLIVE CO.,
300 PARK AVENUE, NEW YORK 22, N. Y.;
SNOW WHITE MADE BY LYK-NU CO., NEW YORK, N. Y.;
M-S-A CLEANER-SANITIZER MADE BY MINE SAFETY
APPLIANCES COMPANY, PITTSBURGH 8, PA.

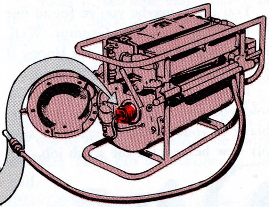
Since you don't get mixing directions with these detergents, it might be a good idea to mix a small amount to try it out.

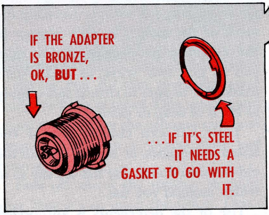
A 5 per cent solution is a good one to start with. But it may vary with local conditions.

ON YOUR M3A3 SMOKE GENERATOR . . .

Check Your Engine-Head Adapter

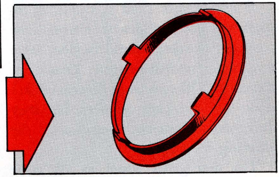
Take a look at the engine-head adapter on your M3A3 smoke generator . . . is it bronze, or steel? If it's bronze, your M3A3 is OK. But if it's a steel adapter she needs the help of a gasket to seal things right between the combustion chamber and the engine head.





The smoke generator you'll most likely find wearing a steel engine-head adapter is the M3A3 model which has been modified from an M3A1.

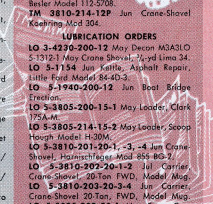
Engine head gasket, FSN 1040-507-4900 (Chem) is what she'll take. You'll find one of these gaskets in the generator's tool box, or you can get it from supply.



A selected list of recent publications of interest to Organizational Maintenance Personnel.

TECHNICAL MANUALS

TM 1-5F8-2-3-21 Jun Oper Ser, Overhaul Inst Airspeed Ind C-14, D-7, F-2.
TM 3-4240-218-15 Jul Mask, Gas, Rocket Propellant, M21.
TM 3-4240-218-25P Jun Mask, Gas Rocket propellant M21.
TM 3-4240-221-15 Jun Mask M14A1 and M14.
TM 3-6665-202-20P Jun Analyzing Kit M26.
TM 5-2420-210-20 Jun Tractor Gas Driven; 3725 to 5175 Drawbar Pull.
TM 5-2805-202-20P Jun Power Unit, Gas 185 BHP; (Minn Moline Mod 1210-12A).
TM 5-3810-216-12P May Crane-Shovel, Crawler, (Baldwin-Lima-Hamilton Mod 802).
TM 5-3810-217-12P May Crane-Shovel, 10 Ton Cap.
TM 5-3810-223-12P May Crane-Shovel, Crawler Thew L-820.
TM 5-3895-212-12P Jun Barber-Greene Model 837.
TM 5-3895-216-10 Jun Finishing Machine, Conc Pav.
TM 5-4120-205-12 Jun Air Cond 18,000 BTU Acme.
TM 5-4120-205-20P Jun Air Cond 18,000 BTU Acme.
TM 5-4210-203-20 Jun Truck Firefighting Hesse Carriage HC26.
TM 5-4120-210-20P Jun Air Cond 8HP, AC 416 V.
TM 5-4210-200-10 Jun Truck Fire Fighting: Fire Master Mod 530 BA 530 BAW.
TM 5-4310-222-20 Jul Compressor, Rotary: Joy Mod RP125 GC 40 MS-3.
TM 5-4310-224-15 Jun Compressor Air 15 CFM 175 PSI Curtis.
TM 5-4310-224-25P Jun Compressor Curtis Mod CVG-969-A-ENG-3.
TM 5-4930-203-12 Jul Manual: Lubricating Service Unit, Skid Mounted, Gray Mod 250-750.
TM 5-6115-226-20 Jun Generator, 1.5 KW DC, 28 V; Winpower.
TM 5-6115-234-20P Jun Generator Set, Diesel 15 KW AC.
TM 5-6115-241-20P Jun Generator Set, Diesel, 15 KW.
TM 5-6115-277-12P Jun Generator Set, 2 KW DC 12V.
TM 5-6115-288-20P Jun Set Diesel Engine Atlantic Mod 120GS.
TM 5-6125-203-20P Jun Motor Generator Power Supply 60.
TM 9-208-2 Jun Cleaning, Drying Ord Materiel.
TM 9-1240-278-20P Jun Optical Bore Sight M45 (T151E1).
TM 9-1430-406-20P May Target Range Set (La Crosse).
TM 9-1430-500-12/2 Jun Radar Set AN/MPQ-33 and AN/MPQ-34 (Hawk).
TM 9-1430-503-20P Apr Acq Set AN/MPQ-34 (Hawk).
TM 9-1430-504-20P Apr Radar Set AN/MPQ-33 (Hawk).
TM 9-1430-505-12/2 Jun Check Pro for Com Console (Hawk).
TM 9-1430-505-20P Console (Hawk).
TM 9-1440-500-20P Apr Launcher (Hawk).
TM 9-1440-500-12/1 Tr Mtd Pallet, and Crew Chi Junc Box (Hawk).
TM 9-2350-202-20P May Gun, Self-Propelled Twin 40mm M42.
TM 9-4931-202-12 Jun Elec Cable Test Set AN/GSM-13A.
TM 9-4935-500-20P May Shop Equip (Hawk).
TM 9-4935-501-12/1 May Simulator Test Set (Hawk).
TM 10-3930-214-10-20 Jul Truck Lift Fork Gas Truck Lift Fork Gas Clark CL-D-751960 CL-D-75 1970.
TM 10-6260-201-20P Jun Lantern, Gasoline case.
TM 10-7360-202-25P Jun Org Fld and Depot Maint Repair Parts and Sp Tool Lists and Maint Allocation Chart, Burner Outfit Deck Baking and Roasting Oven 2 Burners.
TM 11-1520-206-12P Jun Sig Equip H-23D.
TM 11-5805-240-12 May Repeater, Tele AN/TCC11.
TM 11-5805-246-10-20 Jun Terminal, Tele TH-5/TG.
TM 11-5815-265-12P Jun Reperforator TT-15/FG.
TM 11-5820-263-12P Jun Radio Set Group OA-1387/GRC.
TM 11-5820-295-20 Jun Radio Set AN/GRC-19.
TM 11-5820-369-20P Jun Receivers, Radio R-520/URR and R-520A/URR.
TM 11-5826-213-12 May Main Kit MK-428/AR.
TM 11-5831-201-20P Jun Control Intercommunication Set C-1611/AIC.
TM 11-5840-203-20P Jun Power Supply PP-674/TPS-1D PP-674A/TPE-1D.
TM 11-5840-238-20P Jun Radar Set An/FPS-56.
TM 11-5895-216-20P Jun Receiving Set, Counter-measures AN/AIR-8.
TM 11-5895-231-20P Jun Radar Set Controls C-654/APR-9B and C-654A/APR-9B.
TM 11-5895-233-20P Jun Mixer-Amplifier CV-43/APR-9, CV-43A/APR-9, CV-43B/APR-9.
TM 11-6115-204-20 Jun Sets, Gas Eng PU-286A/G & PU-286B/G.
TM 11-6730-201-10 Jun Projection Set, Motion Picture, Sound AS-2(1).
TM 11-6740-200-20 Jun Laboratory Darkrooms AN/TFQ-7, AN/TFQ-7A, and AN/TFQ-7B, and Photo Darkroom Groups OA-419B/TFQ-7 and OA-419C/TFQ-7.
TM 55-2210-208-10 Jun Davenport Besler Model 112-5708.
TM 3810-214-12P Jun Crane-Shovel Koehring Mod 304.



LUBRICATION ORDERS

LO 3-4230-200-12 May Decon M3A3LO 5-1312-1 May Crane Shovel, ¾-yd Lima 34.
LO 5-1154 Jun Kettle, Asphalt Repair, Little Ford Model 84-4D-3.
LO 5-1940-200-12 Jun Boat Bridge Erection.
LO 5-3805-200-15-1 May Loader, Clark 175A-M.
LO 5-3805-214-15-2 May Loader, Scoop Hough Model H-30M.
LO 5-3810-201-20-1, -3, -4 Jun Crane-Shovel, Harnischfeger Mod 855 BG-2.
LO 5-3810-202-20-1-2 Jul Carrier, Crane-Shovel, 20-Ton FWD, Model Mug.
LO 5-3810-203-20-3-4 Jun Carrier, Crane-Shovel 20-Ton, FWD, Model Mug.
LO 5-3895-202-20-1 May Pave, Concrete Worthington Model 34E.
LO 5-3895-202-20-3 May Paver Concrete Worthington Model 34-E.
LO 5-4310-224-15 May Compressor Reciprocating 15CFM 175PSI.
LO 5-5099-1 Jun Compressor, Air, Trailer Mounted, Joy Mod WK-80-315.
LO 5-5099-2 Jun Compressor, Air, Trailer Mounted Joy Mod WK-80-315.
LO 5-5100 May Compressor Air Ingersoll-Rand IK-315.
LO 5-5175 May Engine Gas Hercules RXC.
LO 5-5182 May Engine Gas Leroi H2000.
LO 5-5267 Jun Generator, 30 KW, Onan Mod 30J7-1XE/550N.
LO 5-5274 Jun Generator, 150 KW, Cummins NHRSGA-601-150.
LO 5-5398-2 Jun Compressor, Air Rix SL 500 formerly 1262.
LO 5-6115-240-20 Jun Generator Set Diesel 45 KW AC.
LO 5-6115-241-20 Jun Generator 15KW Jeta MD151815-W.
LO 5-6134 Jun Machine, Printing & Developing, Meteor Mod 55000.
LO 5-6137 Jun Printer, Developer, Ozalid Mod 76500.
LO 5-9032 Jun Trailer, Low-Bed, 8-ton Freuhauf Mod CPT-8.
LO 5-9957 May PCU Cat 21, 24, 25.
LO 9-1055-208-15 Jun Hdlg Unit, 762-MM Rocket M405.
LO 9-2330-236-10 Apr Trailer 1-ton M514.
LO 10-3930-212-20 May Truck, Lift Fork Rough Terrain.
LO 9-1450-500-10 Jun Loader (Hawk).
LO 10-4520-201-10 Apr Heater 250,000 BTU.

ARMY REGULATIONS

AR 710-712 8 July 60 Supply Control —Return of Transportation Corps Controlled Secondary Aviation Items.
AR 711-340 Jul Chem, Reportable Items.
AR 750-540 Jul Replacement or Repair of Eng.

TECHNICAL BULLETINS

TB SIG 239-41 Jul Sig Items for Hawk Bat.
TB QM 106 Jul Maint Instruct Tableware Outfit, Field.
TB QM 107 Jul Maint Instruct Individual Load Carrying Equipment.
TB 9-1345-200/1 Jul Mine, Antipersonnel: M18 Kit M68 and M69.
TB 9-2300-228-20 Jul Tac Trans and Comb Veh Troubleshooting Gages, Switches, Circuit Breakers, Sending Units.

DA FORMS

DA Form 9-176 Jun CW Acq Check Proc (Hawk).
DA Form 9-177 Jun Com Console Check Proc (Hawk).
DA Form 9-178 Jun Radar Set AN/MPQ-33 (Hawk).
DA Form 9-179 Jun Radar Set AN/MPQ-34 (Hawk).
DA Form 9-180 Jun Bat Con Cent Ck, Proc (Hawk).
DA Form 2312 May Trans Bat Con Ck Proc (Hawk).
DA Form 2313 May Pulse Acq Ck Proc (Hawk).

MISCELLANEOUS

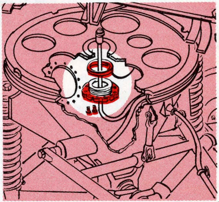
SB 9-195 Jul Ord Items For Self-Ser Supp Ctr.
SB 11-503 Jun Proj Pr Con fr Gr to Variable Cont.
SB 55-33 Jul Maint Float Aircraft.
MWO 55-1520-207-20/6 Jul Inspection of Overspeed Governor and Tachometer Drive Gear Box Housing Hu-1A.
MWO ORD Y-166-W3 Jul Addition of Instruction Cards (Nike).
MWO ORD Y28-W38 Jul Mission-Select Switch (Nike-Hercules).
SM 5-4-1080-S28 Jun Sup Equip, Camouflage Batt.
SIG 7 & 8 KY-306-FSG-1 Jun Decoder, Coordinated Data.

THEY BELONG TOGETHER

DOLL! WE BELONG TOGETHER... LIKE A... ER, ER... NIKE TRAILER AND IT'S FRONT UNDER CARRIAGE.
OHHH, HOW ROMANTIC...

That'd be the front undercarriage and the body of your Nike trailers. They might decide to separate at any time, tho, 'less special attention is given to the undercarriage's king-pin hook-up assembly.

The attention-giving has a one-two punch.



1. LUBE THE ASSEMBLY ONCE A MONTH LIKE IT SAYS IN TM 9-5001-17.
2. ADJUST THE KING-PIN NUT THE RIGHT WAY.

If the assembly's not kept greased, the whole contraption'll freeze up and cause binding. The pressure'll shear off the two lock bolts.

When it comes to tightening the king-pin nut, the word is **hand tight.** Once the nut is drawn up as far as you can get it by hand, then back off only one notch. Next, put the two lock bolts through the nut and into the two holes in the king-pin sleeve . . . then tighten the bolts and secure them with safety wire.

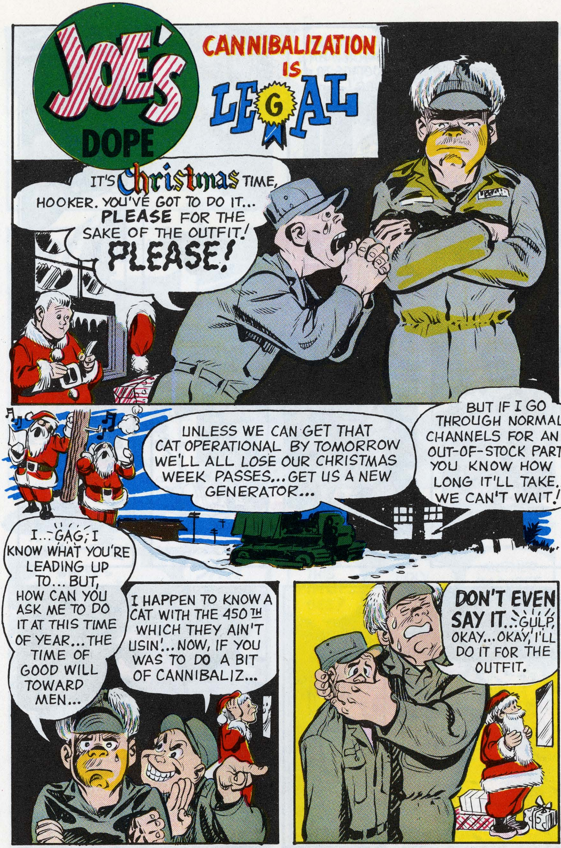
Remember, you only back off one notch after hand-tightenin' the nut. If the nut is left loose, you could still be in trouble.

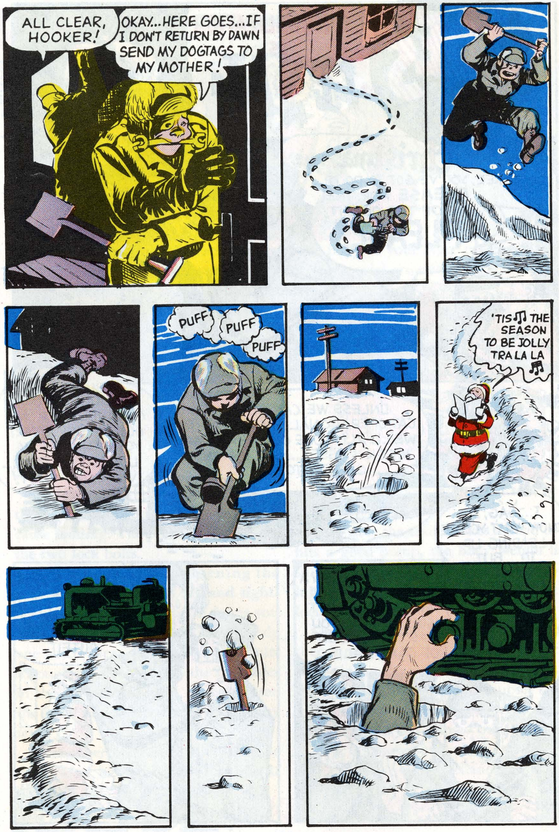
Each time the trailer takes a bend or hits a good bump, the body weight'll shift over to one side of the thrust bearing, and can mean the shearing of the lock bolts.

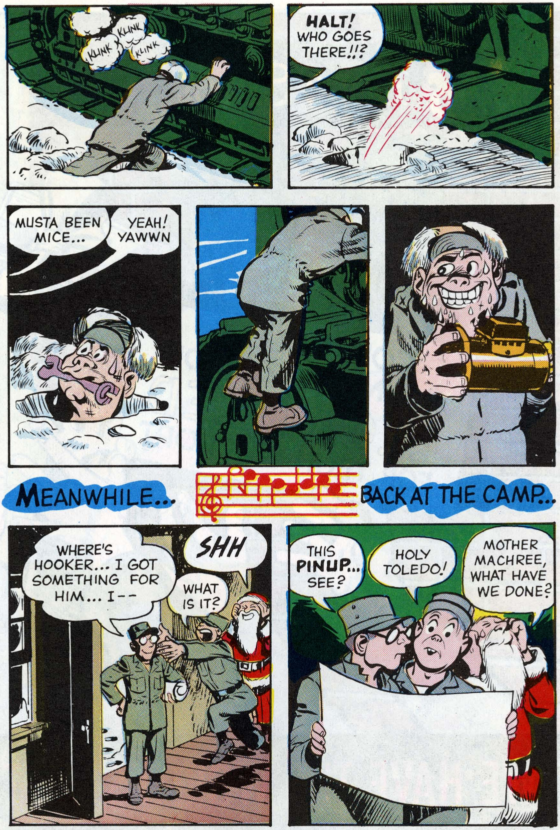
Once those lock bolts have sheared, there's nothing to hold the nut onto the king-pin, so the nut backs off the pin. Now, the smallest bump can upset the apple cart . . . the body'll unseat from the dolly, and you'll lose your load.

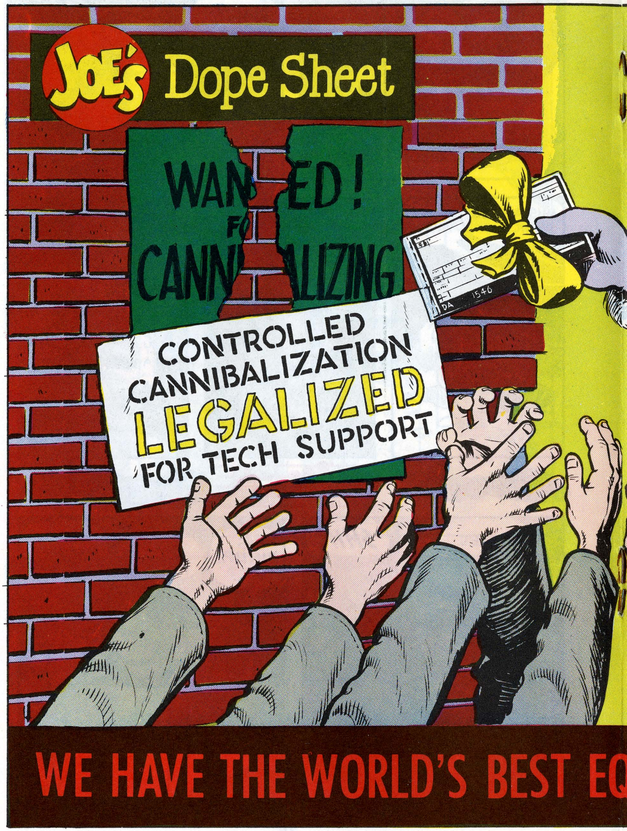
Yep, it's the lubin' and adjustin' that does the trick—take no chances.

REMEMBER: KEEP IT GREASED OR ELSE!

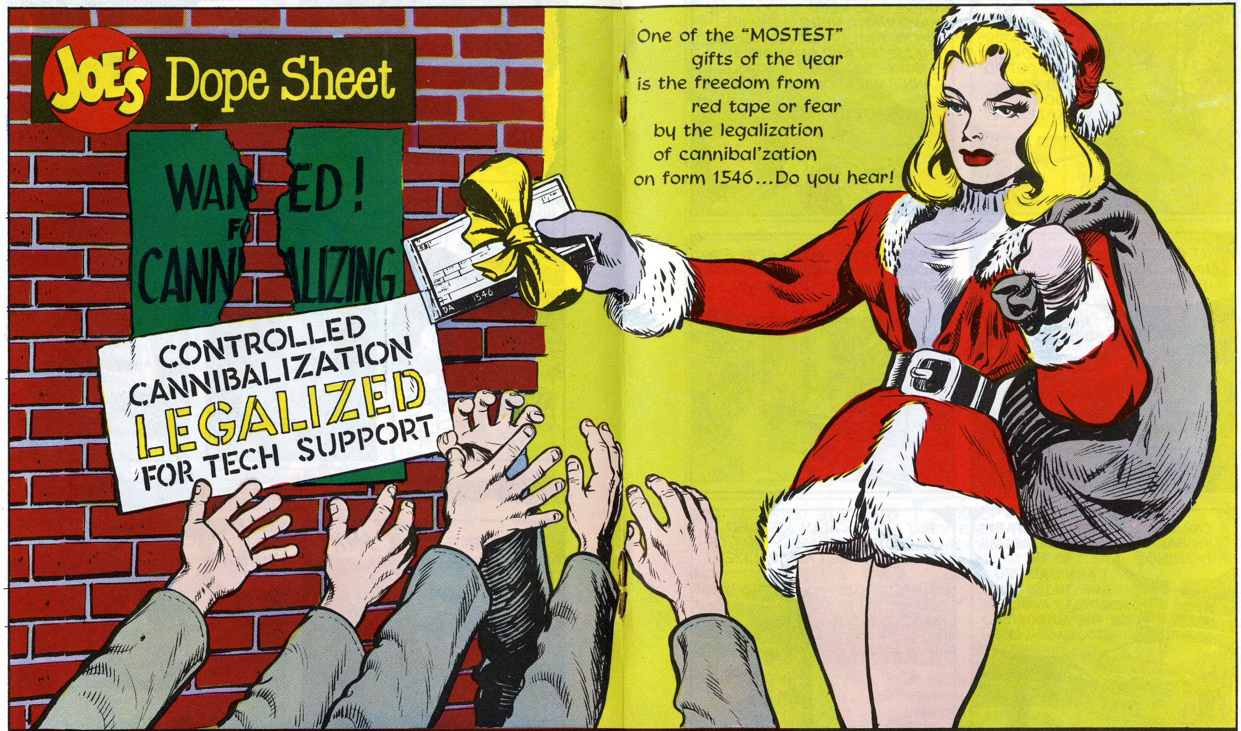

JOE'S DOPE
CANNIBALIZATION IS LEGAL
IT'S Christmas TIME, HOOKER. YOU'VE GOT TO DO IT... PLEASE FOR THE SAKE OF THE OUTFIT! PLEASE!
UNLESS WE CAN GET THAT CAT OPERATIONAL BY TOMORROW WE'LL ALL LOSE OUR CHRISTMAS WEEK PASSES... GET US A NEW GENERATOR...
BUT IF I GO THROUGH NORMAL CHANNELS FOR AN OUT-OF-STOCK PART, YOU KNOW HOW LONG IT'LL TAKE... WE CAN'T WAIT!
I... GAG, I KNOW WHAT YOU'RE LEADING UP TO... BUT, HOW CAN YOU ASK ME TO DO IT AT THIS TIME OF YEAR... THE TIME OF GOOD WILL TOWARD MEN...
I HAPPEN TO KNOW A CAT WITH THE 450TH WHICH THEY AIN'T USIN'... NOW, IF YOU WAS TO DO A BIT OF CANNIBALIZ...
DON'T EVEN SAY IT... GULP, OKAY... OKAY, I'LL DO IT FOR THE OUTFIT.


ALL CLEAR, HOOKER!
OKAY...HERE GOES...IF I DON'T RETURN BY DAWN SEND MY DOGTAGS TO MY MOTHER!
PUFF
PUFF
PUFF
'TIS ♫ THE SEASON TO BE JOLLY TRA LA LA ♬


KLINK
KLINK
KLINK
HALT! WHO GOES THERE!!?
MUSTA BEEN MICE...
YEAH! YAWWN
MEANWHILE...
BACK AT THE CAMP...
WHERE'S HOOKER... I GOT SOMETHING FOR HIM... I--
SHH
WHAT IS IT?
THIS PINUP... SEE?
HOLY TOLEDO!
MOTHER MACHREE, WHAT HAVE WE DONE?

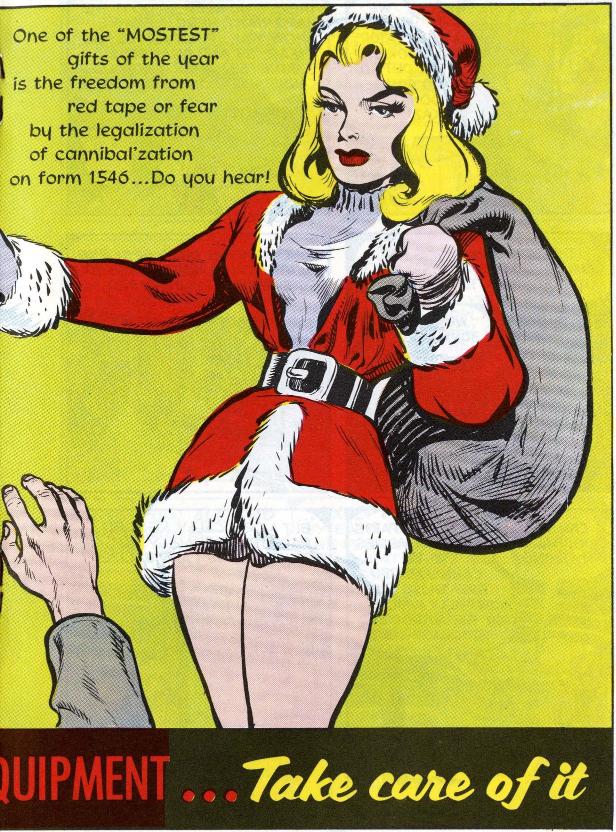

JOE'S Dope Sheet
WAN ED!
FO
CANN ALIZING
CONTROLLED
CANNIBALIZATION
LEGALIZED
FOR TECH SUPPORT
DA 1546
WE HAVE THE WORLD'S BEST EQ

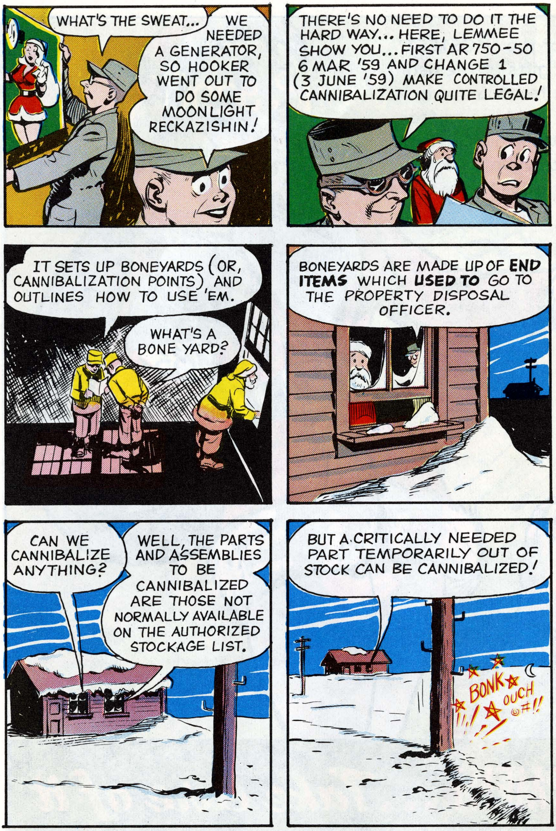
JOE'S Dope Sheet

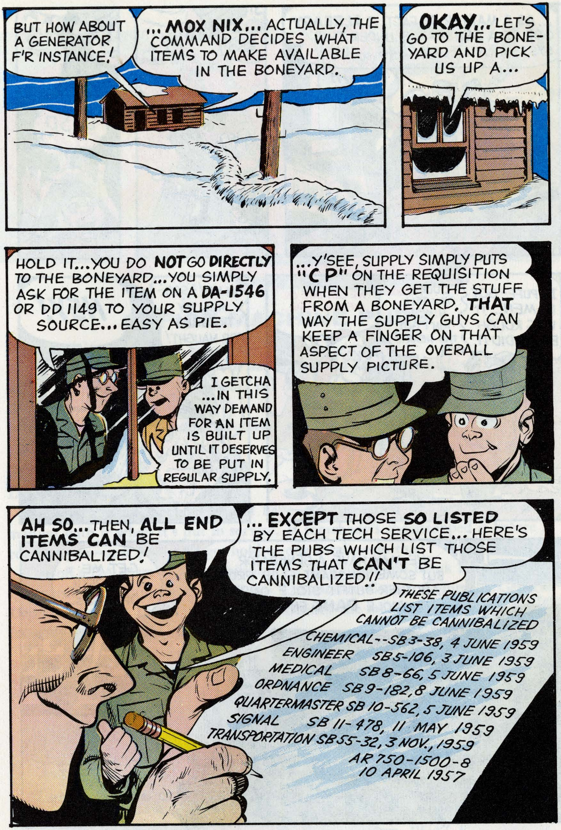

WAN ED!
FO
CANN ALIZING
CONTROLLED
CANNIBALIZATION
LEGALIZED
FOR TECH SUPPORT
DA 1546

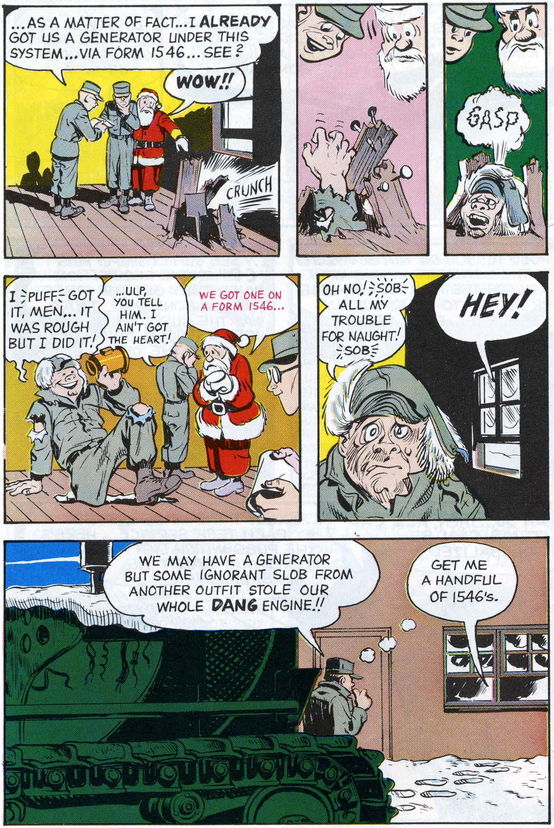
One of the "MOSTEST"
gifts of the year
is the freedom from
red tape or fear
by the legalization
of cannibal'zation
on form 1546...Do you hear!

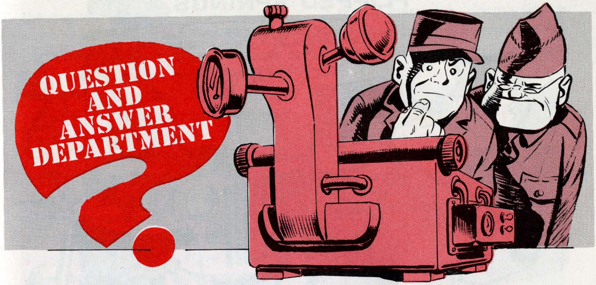
WE HAVE THE WORLD'S BEST EQUIPMENT ...*Take care of it*


One of the "MOSTEST"
gifts of the year
is the freedom from
red tape or fear
by the legalization
of cannibal'zation
on form 1546...Do you hear!
QUIPMENT ...Take care of it


WHAT'S THE SWEAT...
WE NEEDED A GENERATOR, SO HOOKER WENT OUT TO DO SOME MOONLIGHT RECKAZISHIN!
THERE'S NO NEED TO DO IT THE HARD WAY... HERE, LEMMEE SHOW YOU... FIRST AR 750-50 6 MAR '59 AND CHANGE 1 (3 JUNE '59) MAKE CONTROLLED CANNIBALIZATION QUITE LEGAL!
IT SETS UP BONEYARDS (OR, CANNIBALIZATION POINTS) AND OUTLINES HOW TO USE 'EM.
WHAT'S A BONE YARD?
BONEYARDS ARE MADE UP OF **END ITEMS** WHICH **USED TO** GO TO THE PROPERTY DISPOSAL OFFICER.
CAN WE CANNIBALIZE ANYTHING?
WELL, THE PARTS AND ASSEMBLIES TO BE CANNIBALIZED ARE THOSE NOT NORMALLY AVAILABLE ON THE AUTHORIZED STOCKAGE LIST.
BUT A CRITICALLY NEEDED PART TEMPORARILY OUT OF STOCK CAN BE CANNIBALIZED!
BONK
OUCH
©#!!


BUT HOW ABOUT A GENERATOR F'R INSTANCE!
... MOX NIX... ACTUALLY, THE COMMAND DECIDES WHAT ITEMS TO MAKE AVAILABLE IN THE BONEYARD.
OKAY... LET'S GO TO THE BONEYARD AND PICK US UP A...
HOLD IT...YOU DO NOT GO DIRECTLY TO THE BONEYARD...YOU SIMPLY ASK FOR THE ITEM ON A DA-1546 OR DD 1149 TO YOUR SUPPLY SOURCE... EASY AS PIE.
I GETCHA ...IN THIS WAY DEMAND FOR AN ITEM IS BUILT UP UNTIL IT DESERVES TO BE PUT IN REGULAR SUPPLY.
...Y'SEE, SUPPLY SIMPLY PUTS "C P" ON THE REQUISITION WHEN THEY GET THE STUFF FROM A BONEYARD. THAT WAY THE SUPPLY GUYS CAN KEEP A FINGER ON THAT ASPECT OF THE OVERALL SUPPLY PICTURE.
AH SO...THEN, ALL END ITEMS CAN BE CANNIBALIZED!
... EXCEPT THOSE SO LISTED BY EACH TECH SERVICE... HERE'S THE PUBS WHICH LIST THOSE ITEMS THAT CAN'T BE CANNIBALIZED!!
THESE PUBLICATIONS LIST ITEMS WHICH CANNOT BE CANNIBALIZED
CHEMICAL--SB 3-38, 4 JUNE 1959
ENGINEER SB 5-106, 3 JUNE 1959
MEDICAL SB 8-66, 5 JUNE 1959
ORDNANCE SB 9-182, 8 JUNE 1959
QUARTERMASTER SB 10-562, 5 JUNE 1959
SIGNAL SB 11-478, 11 MAY 1959
TRANSPORTATION SB 55-32, 3 NOV., 1959
AR 750-1500-8 10 APRIL 1957


...AS A MATTER OF FACT...I ALREADY GOT US A GENERATOR UNDER THIS SYSTEM...VIA FORM 1546...SEE?
WOW!!
CRUNCH
GASP
I ≶PUFF≶ GOT IT, MEN... IT WAS ROUGH BUT I DID IT!
...ULP, YOU TELL HIM. I AIN'T GOT THE HEART!
WE GOT ONE ON A FORM 1546...
OH NO! ≶SOB≶ ALL MY TROUBLE FOR NAUGHT! ≶SOB≶
HEY!
WE MAY HAVE A GENERATOR BUT SOME IGNORANT SLOB FROM ANOTHER OUTFIT STOLE OUR WHOLE DANG ENGINE!!
GET ME A HANDFUL OF 1546's.


QUESTION AND ANSWER DEPARTMENT

OFFICE MACHINE PUBS

Dear Half-Mast,

I've just received a new typewriter that has a few extra gadgets on it I've never seen before. The only trouble is I didn't get a booklet or brochure or any literature with the typewriter.

Does the Army supply these booklets—and if so, where and how can I get one?

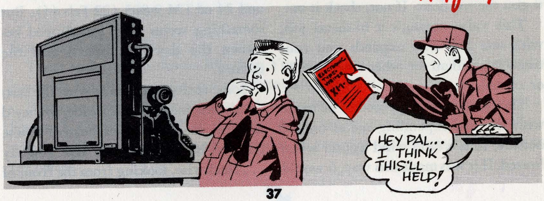
M. M. C.

Dear M. M. C.,

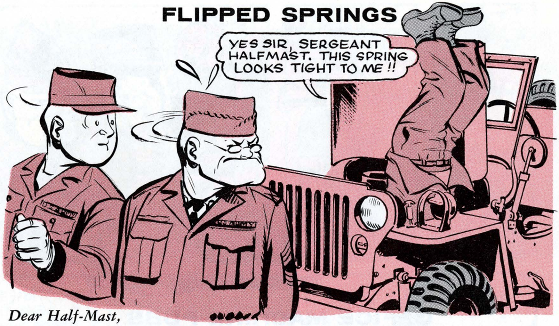
Every new office machine should have an instruction or "get acquainted" manual with it when it's put in service. If somebody's shortstopped it before it reached you—or if you can't get hold of one locally—do this:

Fire off a DA Form 17 (Requisition for Publications and Blank Forms) to the Quartermaster Equipment and Parts Commodity Center, Columbus General Depot, Columbus 15, Ohio. Be sure to identify the machine, giving the manufacturer's name, model, serial numbers, etc.

Half-Mast


ELECTRONIC TYPE-WRITER XM-
HEY PAL... I THINK THIS'LL HELP!

FLIPPED SPRINGS


YES SIR, SERGEANT HALFMAST. THIS SPRING LOOKS TIGHT TO ME !!
U.S. ARMY
U.S. ARMY

Dear Half-Mast,

After cleaning the manifold heat control valve on our M38 Jeep, we ran into a problem on putting the spring back in place.

Fig 69 of TM 9-1804A (11 Jun 51) the only reference we can find on this, shows this spring running counterclockwise (looking from the front of the engine) around the counterweight shaft.

But all the other M38's I've checked have the end of the spring lying flat on top of the stop with the coils running clockwise under and around the shaft.

With the spring installed clockwise (looking from the front), the valve seems to work right. As the engine warms up, the shaft turns counterclockwise, lifting the counterweight. But installed the way it's shown in Fig 69 of the TM, the spring would hold the valve shut tight instead of opening it as heat builds up.

What's the score?

CWO C. H. McL.

Dear CWO C. H. McL.,

That's the right way to read a TM, Sir. Do exactly what it says as long as it gets the job done. If not, check it out.

This valve spring's a bi-metal job, with one side that expands and contracts faster than the other when heated or cooled.

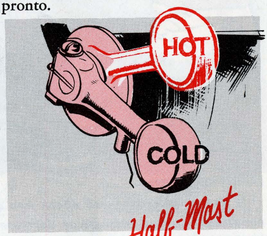
The spring was supposed to be made with the fast-expanding metal on the outside, so it would wind tighter when heated. If it was made this way, it would need to be installed like it's shown in Fig 69 of TM 9-1804A and in Figs 23 and 24 of TM 9-803 (22 Feb 44). But something seems to've got flipped between the drawing board and the factory.

Some springs got made with the fast-expanding metal on the inside, so they'd unwind or relax when heated. These have to be installed just like you say . . . clockwise, looking from the front of the engine. That's so they'll turn that valve shaft counterclockwise and open up the valve as the engine warms up.

So, as you can see, both you and the pubs could be right, depending on which metal landed on top when that bi-metal spring was made.

The important thing to remember is this: Your counterweight should swing low when the engine's cold. Then, as the engine manifold heats up, the arm should lift the counterweight in a counterclockwise direction (looking from the front). And the counterweight ought to stay up while the engine's hot.

If the counterweight doesn't lift up as the engine heats up, you need to flip that spring over . . . or get a new one pronto.



Half-Mast

Dear Half-Mast,

I'm a little like that gal in "My Fair Lady" who sang ". . . don't talk of love—SHOW ME!"

I don't exactly expect romance from any inspector, but what I would like to know is if there is any regulation that requires an inspector to show you, when you get gigged, just what you have to fix and what authority says you were wrong.

MSgt. J. L. D.

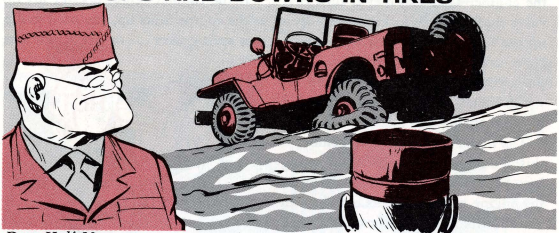
Dear Sergeant J. L. D.

There sure is a regulation like that. You won't find it in your orderly room because it's not distributed down to organizational level.

But your inspector sure ought to be familiar with it. If he has read paragraph 4c, Section I, Chapter I, in TB IG 2 (July 58) he knows that he is obliged to tell you what you have to correct and point out to you the regulation that you've not followed.

Half-Mast

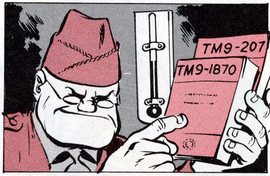
UPS AND DOWNS IN TIRES



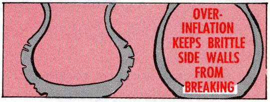
Dear Half-Mast,

We're a little confused about tire air pressure. Just when and under what conditions do you increase or decrease PSI?

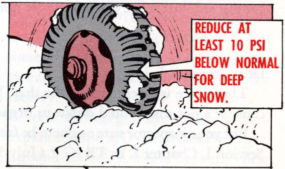
SP5 H. E. K.



TM9-207
TM9-1870



OVER-INFLATION KEEPS BRITTLE SIDE WALLS FROM BREAKING



REDUCE AT LEAST 10 PSI BELOW NORMAL FOR DEEP SNOW.

Dear Specialist H. E. K.,

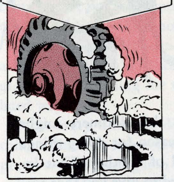
Here's how you gage the when's and where's on air pressure for tires: Extreme cold weather (under −20 F)—increase tire pressure by 10 per cent. Para 78b of TM 9-1870-1 (Feb 55), "Care and Maintenance of Pneumatic Tires," says: "To minimize this effect of low temperatures . . . increase tire pressure by 10 per cent (this reduces rubbing the tube against the tire)."

Overinflation also smoothes out any flat spots you might have and keeps brittle sidewalls from breaking.

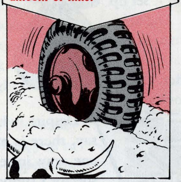
Deep Snow—decrease tire pressure about 10 per cent. In TM 9-207 (Sep 59), "Ordnance Material in Extreme Cold weather 0° to −65° F.," para 65i says: "Keep tires at reduced pressure for operation in deep snow. In some cases, it has been necessary to reduce the pressure at least 10-PSI below that specified for normal conditions."

This gives the tires better traction (surface grip)—but it may not work in all conditions of snow.

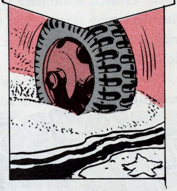
When there are no special instructions in the tech manual for your vehicle, here are some by-the-thumb rules you might want to remember:



For muddy, rocky or wet, snow country—pressure should be reduced about 50 per cent.



For soft sand—pressure should be reduced about 60 per cent if you're operating for any amount of time.



For sand dunes or landing on sandy beaches—pressure should be reduced about 70 per cent.

Adjust your tire air to whatever situation you're in—but remember that as soon as you can . . . get your tires back to their normal pressure.

Half-Mast

QM INFO FINDER

ALL I WANTED WAS THE DOPE ON FUR BOOTS... 'N LOOKIT ALL THE TM'S THEY GAVE ME.

Dear Half-Mast,

Now that TB QM 32, "Conservation of Clothing, Equipage and General Supplies," has been rescinded, where do we look for the info this TB had?

SFC R. M.

Dear SFC R. M.,

The dope that used to appear in TB QM 32 has been parlayed into eight individual pubs—seven TM's and an FM. Here's the breakdown:

SEE	FOR
TM 10-267	Clothing and Textiles
TM 10-268	Footwear and Leather Goods
TM 10-269	Canvas and Webbing Items
TM 10-270	QM Items of General Equipment

SEE	FOR
TM 10-701	M-1937 Range Outfit
TM 10-703	Small Detachment Cooking Outfit
TM 700-8400-1	Fitting of Uniforms
FM 21-15	Care and Use of Individual Clothing and Equipment

Half-Mast

YOUR FRIENDLY INSPECTOR CAN LEND A HAND

BEFORE THE

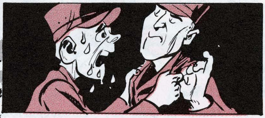
Just about every Soldier figures the Army created a monster when it set up the inspection system. Not so. The original idea was to help the man in the field. It still is.

Ha—you say—tell me another. OK... perk up your ears and lean forward.

INSPECTION TODAY

Despite what the oldtimers might say, there is a reason for doing things one way instead of another. That inspector's supposed to give you that reason before he pulls out his pencil and pad and starts gigging you up one side and down the other.

A gig is useless unless it's matched by instructions on what to correct and what the regulations say (or don't say) about the situation that caused the gig.



The purpose of a gig is to point out what you're doing wrong or what you didn't do. So every time you take one on the chin, the inspector's supposed to give you an answer to your problem. But it's up to you to hold him to it . . . whether it's an IG, command or command maintenance type of inspection.

One way to beat off gigs before an inspection is to ask. Ask your local IG or command for the way they see it on things that are controversial...that can be interpreted one way by you, another way by the inspector.

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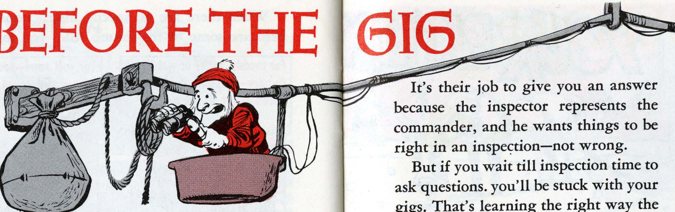

INSPECTION
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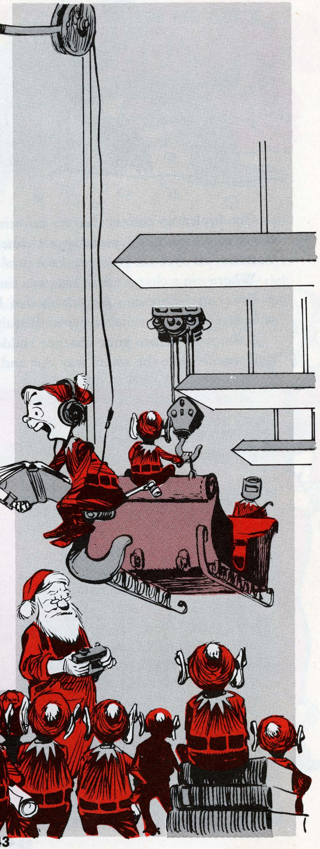
It's their job to give you an answer because the inspector represents the commander, and he wants things to be right in an inspection—not wrong.

But if you wait till inspection time to ask questions. you'll be stuck with your gigs. That's learning the right way the hard way.

Most every time you don't do something a directive says you **will** do, you're pretty sure of getting it in an inspection.

Seldom do you get gigged for doing more than you need to . . . unless it's excessive. For example, overmaintenance can mess up your deadline rate as much as undermaintenance, or the wrong kind of maintenance. And trying to keep up too many **extra** files can foul up your records system with a backlog of postings the same as too little paperwork. You might like operating that way, but if the inspector thinks it's hurting your unit's overall mission . . . gig.

Now that's the way the inspection system's **supposed to** operate. But an inspector can go overboard, too. So just remember you've got a right to complain—and a right to get an answer. The IG or higher command is the one to solve the conflicts—not you or your unit.



INSPECTION
TOMORROW

GIG

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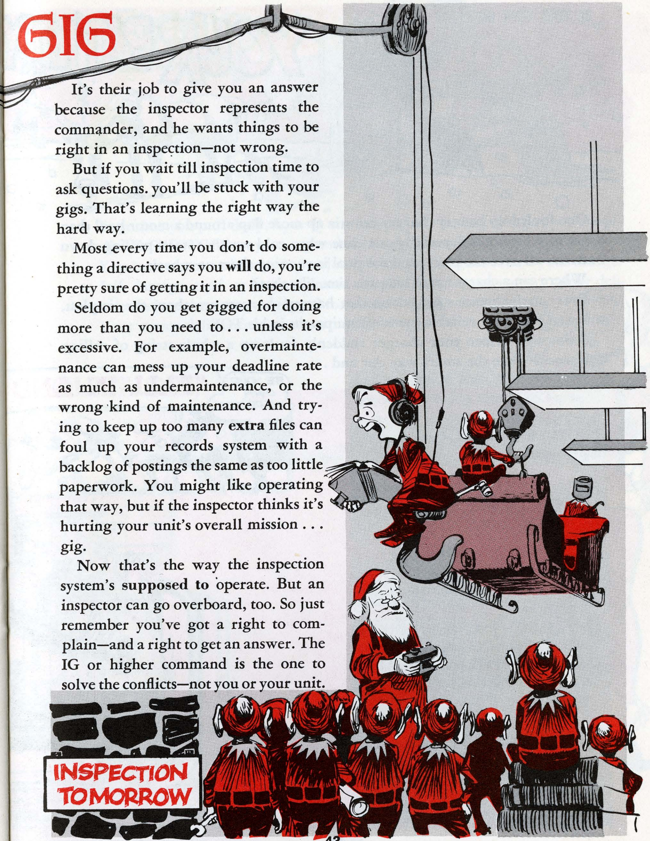
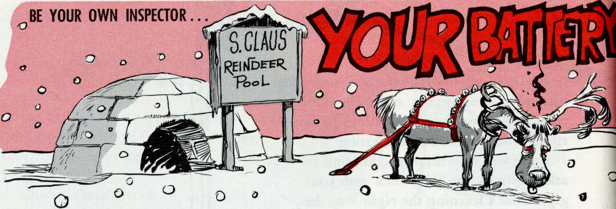


BE YOUR OWN INSPECTOR . . .

YOUR BATTERY



One fouled up battery charger can stir up more flap around a motor pool than a fox in a henhouse—specially at a time when cold weather starts pulling down batteries all over the place, and the pool is running short on wheels.

Where can a charger man hide at a time like that?

Every maintenance man knows that battery chargers are about the simplest, toughest and most reliable items of equipment in his TOE.

Sooo-oo-o—before your charger suddenly fouls up a whole string of rolling equipment—take the smart way out and . . .

BE YOUR OWN INSPECTOR.

"FALL IN AND

OPERATING LOCATION—Crowded, dusty, greasy, **not level.**

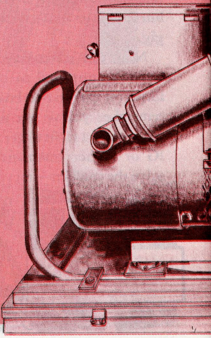
INSIDE OPERATION—**Exhaust extension missing.** Leaky union.

SAFETY EQUIPMENT—**Fire Extinguisher missing,** low charge, corroded, damaged.

PUBLICATIONS, FORMS—Canvas operational case missing, ripped. DA pubs, forms missing. You should have the TB, TM, LO and DA Form 285 report of individual accident, for your particular item.

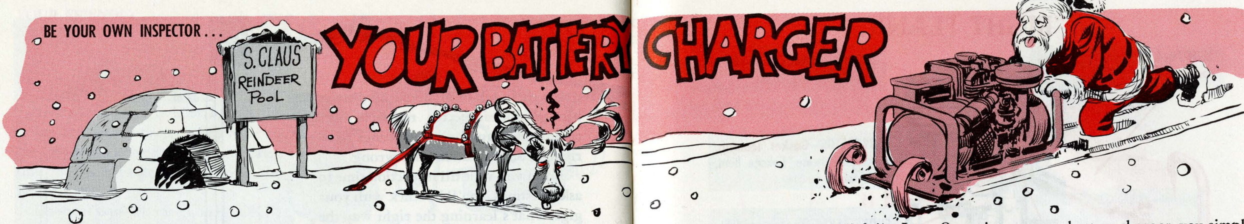
ELECTRICAL ITEMS—**Missing, damaged, unserviceable.**

TOOLS & EQUIPMENT—Dirty, rusty, missing, unserviceable.



BE YOUR OWN INSPECTOR . . .

YOUR BATTERY CHARGER


S. CLAUS
REINDEER
POOL

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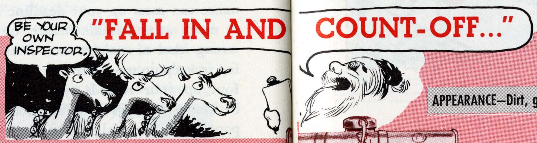
Each time you pull daily, **L**, or **Q** services on your battery charger, you simply chalk "INSPECTOR" on your cap and try to gig yourself.

You look—test—and listen for major deficiencies that could cause your charger to fail, damage itself, or become unsafe to operate. And, you correct minor deficiencies before they get you gigged for unsatisfactory maintenance.

Your major deficiencies are shown in **bold type.**


BE YOUR OWN INSPECTOR.
"FALL IN AND COUNT-OFF..."

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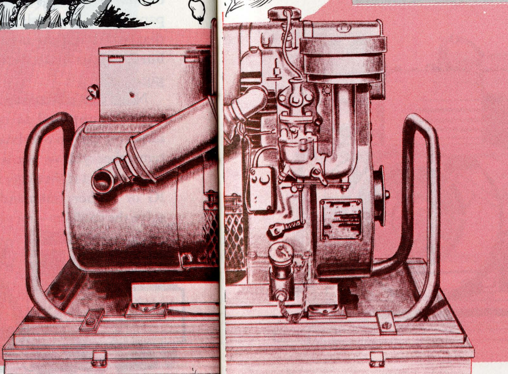
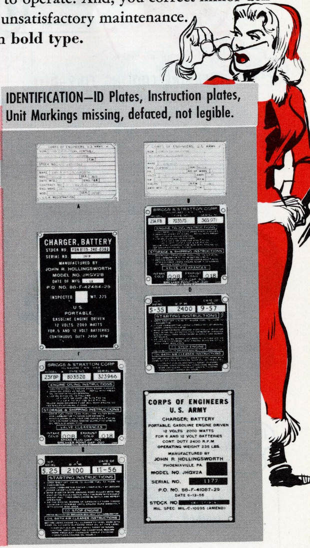
TOOLS & EQUIPMENT—Dirty, rusty, missing, unserviceable.

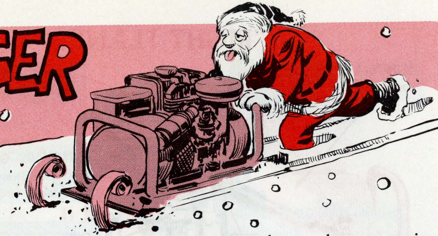
APPEARANCE—Dirt, grease on surfaces.



IDENTIFICATION—ID Plates, Instruction plates, Unit Markings missing, defaced, not legible.


A
B
CHARGER, BATTERY
MANUFACTURED BY
JOHN R. HOLLINGSWORTH
MODEL NO. JHGV2B
P O NO. 88-F-42484-29
INSPECTED
WT. 225
U. S.
PORTABLE,
GASOLINE ENGINE DRIVEN
12 VOLTS 2000 WATTS
FOR 6 AND 12 VOLT BATTERIES
CONTINUOUS DUTY 2400 RPM
C
BRIGGS & STRATTON CORP
23FBP 803520 323966
ENGINE OILING INSTRUCTIONS
STORAGE & SHIPPING INSTRUCTIONS
VALVE CLEARANCES
.008 .018
5.25 2100 11-56
STARTING INSTRUCTIONS
TO STOP ENGINE
BRIGGS & STRATTON CORP
23A FB 703575 365971
ENGINE OILING INSTRUCTIONS
STORAGE & SHIPPING INSTRUCTIONS
VALVE CLEARANCES
.008 .018
D
S-35 2400 9-57
STARTING INSTRUCTIONS
TO STOP ENGINE
E
CORPS OF ENGINEERS
U. S. ARMY
CHARGER, BATTERY
PORTABLE, GASOLINE ENGINE DRIVEN
12 VOLTS 2000 WATTS
FOR 6 AND 12 VOLT BATTERIES
CONT. DUTY 2400 R.P.M.
OPERATING WEIGHT 235 LBS.
MANUFACTURED BY
JOHN R. HOLLINGSWORTH
PHOENIXVILLE, PA.
MODEL NO. JHGV2A
SERIAL NO. 1177
P.O. NO. 88-F-41087-29
DATE 5-12-56
STOCK NO.
MIL. SPEC. MIL-C-10095 (AMEND)

CHARGER



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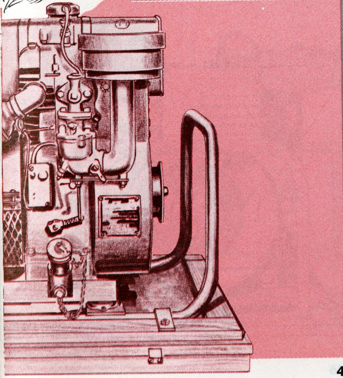

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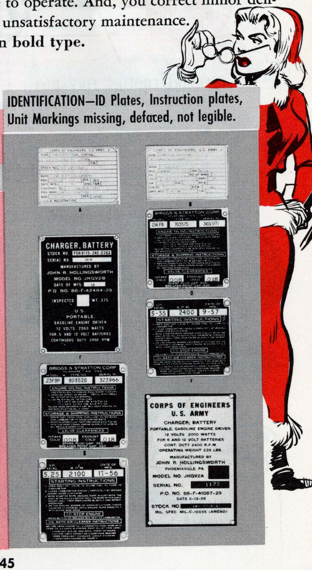
A
B
CHARGER, BATTERY
STOCK NO.
SERIAL NO.
MANUFACTURED BY
JOHN R. HOLLINGSWORTH
MODEL NO. JHGV2B
DATE OF MFG.
P O NO. 88-F-42464-29
INSPECTED
WT. 225
U.S.
PORTABLE
GASOLINE ENGINE DRIVEN
12 VOLTS 2000 WATTS
FOR 6 AND 12 VOLT BATTERIES
CONTINUOUS DUTY 2400 RPM
C
BRIGGS & STRATTON CORP
23FBP
803528
323966
ENGINE OILING INSTRUCTIONS
STORAGE & SHIPPING INSTRUCTIONS
D
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703575
365971
E
5.25
2100
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STARTING INSTRUCTIONS
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S-35
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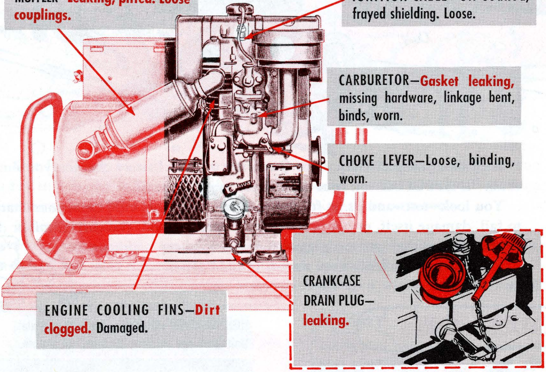
P.O. NO. 88-F-41087-29
DATE 6-13-56
STOCK NO
MIL. SPEC. MIL-C-10995 (AMEND)

"RIGHT FLANK..."



MUFFLER—Leaking, pitted. Loose couplings.

IGNITION CABLE—Oil-soaked, frayed shielding. Loose.

CARBURETOR—Gasket leaking, missing hardware, linkage bent, binds, worn.

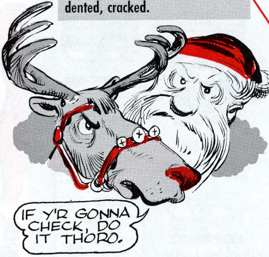
CHOKE LEVER—Loose, binding, worn.

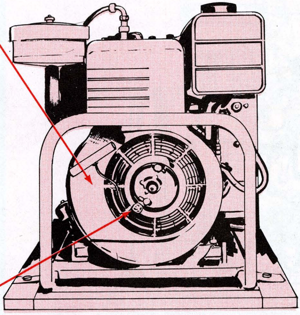
ENGINE COOLING FINS—Dirt clogged. Damaged.

CRANKCASE DRAIN PLUG—leaking.

"FRONT RANK..."

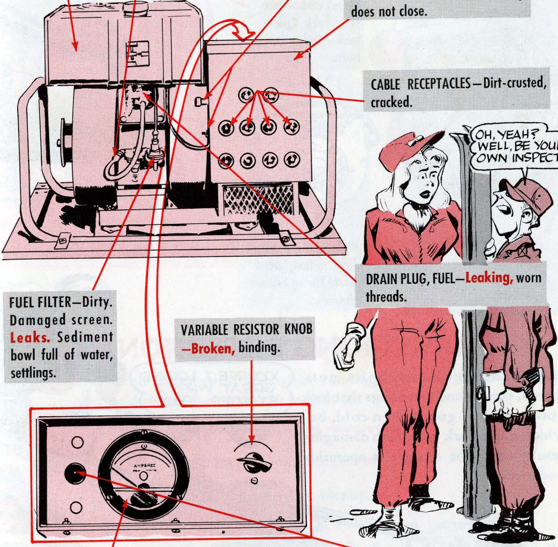
BLOWER HOUSING—Dirt-clogged, dented, cracked.


IF Y'R GONNA CHECK, DO IT THORO.



STARTER PULLEY—Cocked, chipped, cracked.

"LEFT FLANK..."


OH, YEAH? WELL, BE YOUR OWN INSPECTOR!
AMPERES

FUEL TANK—**Leaking,** dented, loosely mounted. **Filler cap missing,** dirty, **loosely fitting.**

START-STOP SWITCHES—**Broken,** binding, **loose connections,** loose mounting.

FUEL LINE—**Tubing split,** kinked. Fuel cock binds. **Loose connections. Leaks.**

CONTROL PANEL COVER—Missing, does not close.

CABLE RECEPTACLES—Dirt-crusted, cracked.

DRAIN PLUG, FUEL—**Leaking,** worn threads.

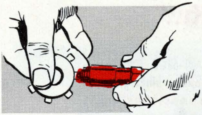
FUEL FILTER—Dirty. Damaged screen. **Leaks.** Sediment bowl full of water, settlings.

VARIABLE RESISTOR KNOB—**Broken,** binding.

AMMETER—**Jammed indicator.** Glass cracked, broken, missing.

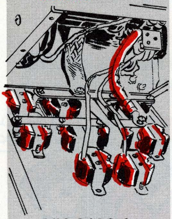
RELAY SWITCH—**Broken,** binding, loose mounting.

DEPARTMENT



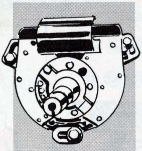
SPARK PLUG — **Insulation cracked;** points burnt, carboned, pitted. Gap out of adjustment.

CONTROL WIRING Frayed insulation, **loose connections.**

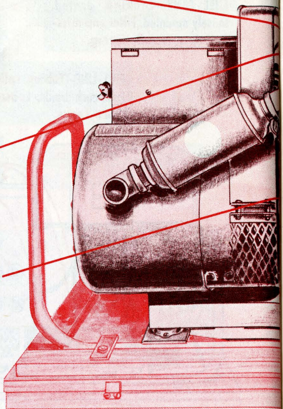


BUS BARS & BRACKETS — Fasteners loose, missing.

CYLINDER HEAD — **Excess carbon prefires fuel. Cracks, leaks, loose nuts, bolts.**



MAGNETO — Points dirty, pitted, need reset. Wiring loose, abrasions.

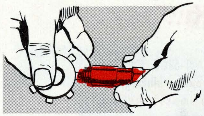


ARMSTRONG INSPECTION

Test and tighten all bolts, nuts, screws, clamps and fastenings that look good and feel good when cold, but which could work loose with damaging results when the charger is operating under load.

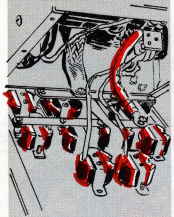
'COURSE I LOOKED GREAT WHEN I STARTED... BUT

DEPARTMENT OF INTERIOR



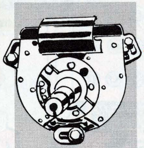
SPARK PLUG—Insulation cracked; points burnt, carboned, pitted. Gap out of adjustment.

CONTROL WIRING Frayed insulation, loose connections.

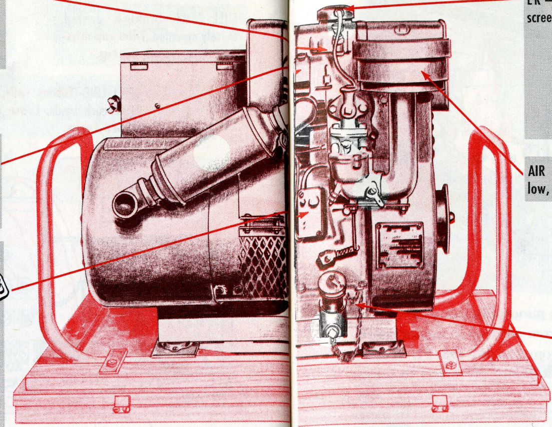


BUS BARS & BRACKETS—Fasteners loose, missing.

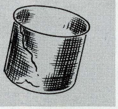
CYLINDER HEAD—Excess carbon prefires fuel. Cracks, leaks, loose nuts, bolts.



MAGNETO—Points dirty, pitted, need reset. Wiring loose, abrasions.



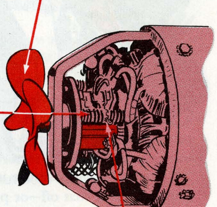
FUEL TANK FILLER STRAINER—Dirty. Damaged screen.



DEAD LINED
S. Claus

GENERATOR FAN—Bent blades; crusted dust, grease.

AIR CLEANER—Oil level too low, too high. Oil dirty.



COMMUTATOR—Sparking, dirty, pitted, high mica.

CRANKCASE—Oil level low. Oil dirty.

CRANKCASE BREATHER—Filter clogged.

GENERATOR BRUSHES—Worn, broken, binding in holders.

'COURSE I LOOKED GREAT WHEN I STARTED... BUT

ARMSTRONG INSPECTION

Test and tighten all bolts, nuts, screws, clamps and fastenings that look good and feel good when cold, but which could work loose with damaging results when the charger is operating under load.

OPERATING INSPECTION

Look—and listen—with the charger running, for these deficiencies that cannot be detected during at-halt inspection:

ENGINE—Misfiring, surging, racing, overheating.

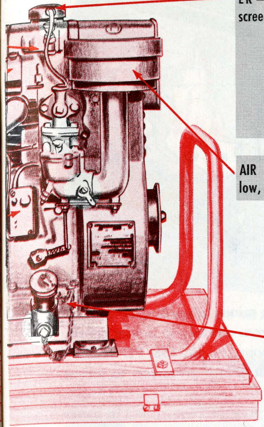
GENERATOR—Low, fluctuating current output.

GENERAL—Squeaks, rattles, vibration, leaks.

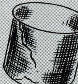
REPORT OF INSPECTION

Before you rub that "INSPECTOR" chalk off your cap, rate yourself as a charger maintenance man. If you found some deficiencies, clean 'em up before you get caught with your batteries down. If you can't handle 'em, get the word to your hon-cho pronto.

OF INTERIOR



FUEL TANK FILLER STRAINER—Dirty. Damaged screen.



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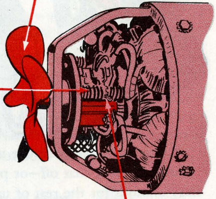

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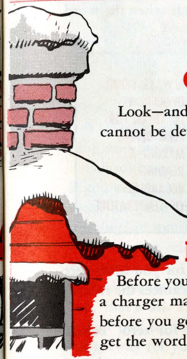

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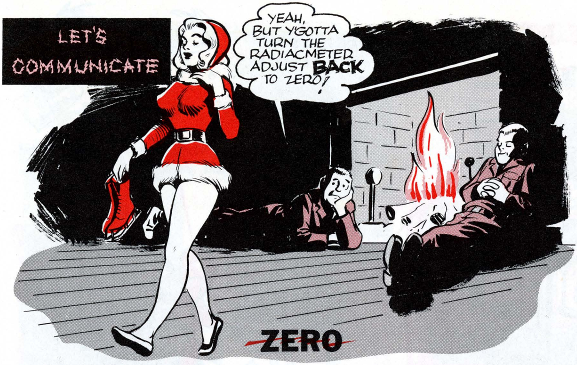
LET'S COMMUNICATE

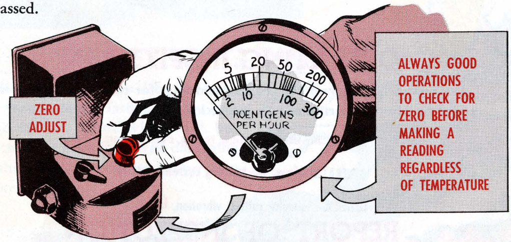

YEAH, BUT Y'GOTTA TURN THE RADIACMETER ADJUST BACK TO ZERO!

ZERO

A change in temperature usually calls for some minor adjustments.

Either take a coat off—or put one on—or shift from outdoor to indoor sports. Easy enough for the rest of us to do. But what about the IM-108/PD Radiacmeter? It's very sensitive to temperature shifts but pretty powerless to adjust itself!

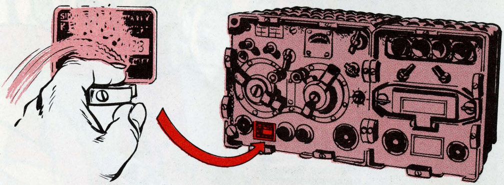
Take that instrument from one ambient temperature to another and its meter needle will drift upscale just as sure as you'll head for the shade when the word is passed.


ZERO ADJUST
1
2
5
10
20
50
100
200
300
ROENTGENS PER HOUR
ALWAYS GOOD OPERATIONS TO CHECK FOR ZERO BEFORE MAKING A READING REGARDLESS OF TEMPERATURE

The ZERO ADJUST switch, of course, makes it possible for you to correct that drift and bring the needle back to zero. This, in turn, guarantees the radiacmeter will give an accurate Roentgen reading.

As a matter of fact, it's always good operations to "check for zero" before making a reading—regardless of the temperature.

STARTING FROM SCRATCH



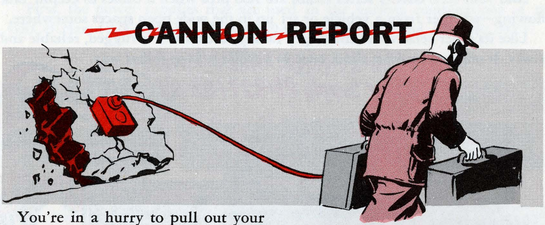
One way to scratch an RT-66/GRC Receiver-Transmitter is to scratch up the decals.

And it's mighty easy to do with your ring or fingernail when tightening or loosening the dzus fastener right below them.

And if the decals are scratched up, you've got no way of identifying the set for possible MWO actions.

Not that you should slip off your ring or chew down your fingernails to the first knuckle before messing with the dzus fasteners. Just be sure you don't scratch that decal whenever you make loose or unloose with the dzus.

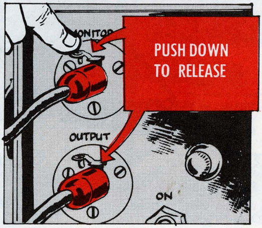
CANNON REPORT



You're in a hurry to pull out your plug and move on.

But take one quick look first. 'Cause if you're plugged in to a cannon receptacle all your pulling will get you nothing but some deadlined equipment. You've got to release the plug from the receptacle.

Push down that little lever on the top, that's all. If you take the finger action just to do that, your plug will plug away for you every time.



BE YOUR OWN INSPECTOR ON . . . YOUR

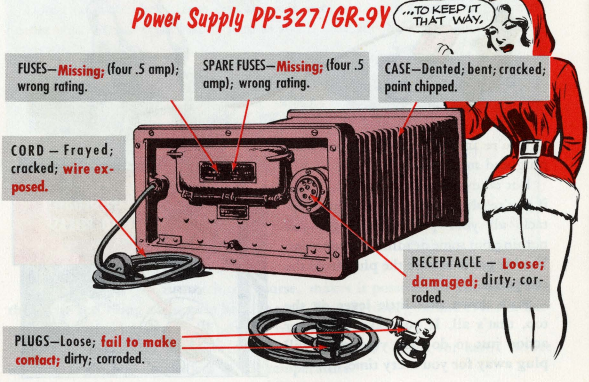
Talk. Talk. Talk.

Some say talk is cheap, but when the tactical situation gets sticky, it's mighty comforting to be in touch with the rest of your unit. Talk is a sweet sound.

And your AN/GRC-9 series radios are real pros when it comes to keepin' talk flowing—whether from a vehicle or set up in the wide open spaces somewhere.

Like its other relatives in the Angry family, the GRC-9 is rugged, reliable and ready. It only asks a short check once in a while to keep it that way.

Power Supply PP-327/GR-9Y


...TO KEEP IT THAT WAY.

FUSES—Missing; (four .5 amp); wrong rating.

SPARE FUSES—Missing; (four .5 amp); wrong rating.

CASE—Dented; bent; cracked; paint chipped.

CORD — Frayed; cracked; wire exposed.

RECEPTACLE — Loose; damaged; dirty; corroded.

PLUGS—Loose; fail to make contact; dirty; corroded.

BE YOUR OWN INSPECTOR ON . . .

YOUR ANGRY 9

EQUIPMENT'S GETTIN' MORE COMPLEX EVERY DAY... TIME WAS WHEN... LETTERS WAS GOOD ENOUGH.

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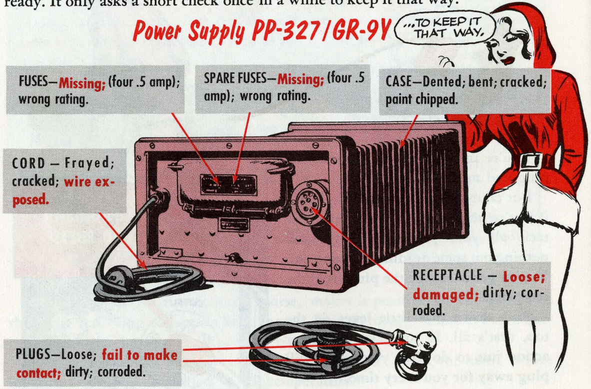
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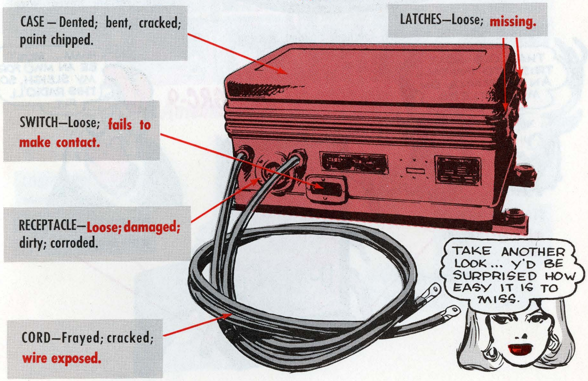
RECEPTACLE — **Loose; damaged;** dirty; corroded.
PLUGS—Loose; **fail to make contact;** dirty; corroded.

This Be-Your-Own-Inspector will help keep a finger on its pulse and make sure it delivers healthy communications every time.

As usual, the items in **bold type** are major deficiencies—which means they should be corrected before the set is operated. The other items are minor deficiencies. They may not mean trouble just yet, but they can develop into a snafu if not caught in time.

First, the power supplies that are used in the various combinations of the GRC-9 clan (AN/GRC-9; AN/GRC-9A; AN/GRC-9X and AN/GRC-9Y) . . .

Vibrator Power Supply PE-237


CASE—Dented; bent, cracked; paint chipped.
LATCHES—Loose; **missing.**
SWITCH—Loose; **fails to make contact.**
RECEPTACLE—**Loose; damaged;** dirty; corroded.
CORD—Frayed; cracked; **wire exposed.**
TAKE ANOTHER LOOK... Y'D BE SURPRISED HOW EASY IT IS TO MISS.

ANGRY 9
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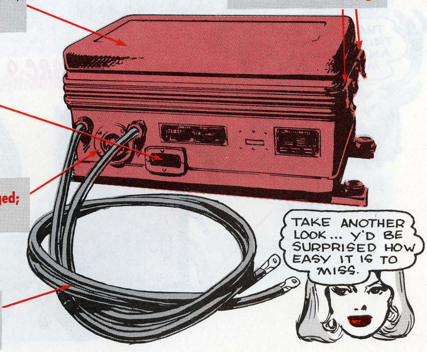
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LATCHES—Loose; **missing.**

SWITCH—Loose; **fails to make contact.**

RECEPTACLE—**Loose; damaged;** dirty; corroded.

CORD—Frayed; cracked; **wire exposed.**

Dynamotor-Power Supply DY-88/GRC-9

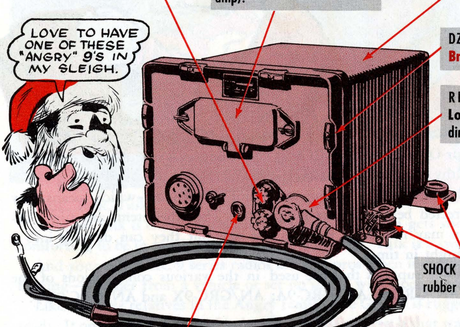
FUSES—Missing (1 Dyn. 1 Vib); not placed right.

SPARE FUSES—Missing (three 5-amp, one each 10, 20, 30 amp).

CASE—Bent; broken; dented; paint chipped.

DZUS FASTENERS—Broken; missing.

RECEPTACLES—Loose; damaged; dirty; corroded.


LOVE TO HAVE ONE OF THESE "ANGRY" 9'S IN MY SLEIGH.

SHOCK MOUNTS—Loose; rubber cracked; dried out.

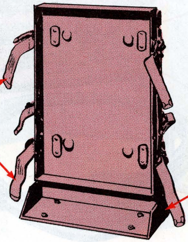
CABLE—Cracked; frayed; wire exposed.

VOLTAGE INDICATOR WINDOW—Cracked; clouded; missing.

THAT OLD GOAT TRIED TO INSTALL AN ANTENNA ON MY ANTLERS.

Mounting MT-350/GRC-9

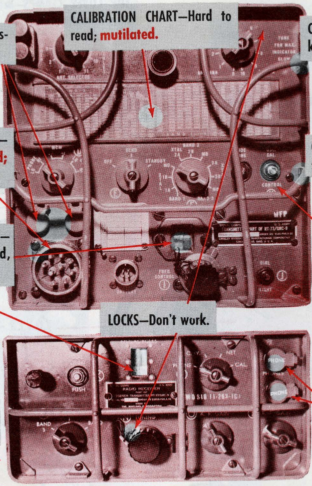
HMM... MUST BE AN MWO FOR MY SLEIGH, SO THIS RADIO'LL FIT.



STRAPS—Loose; missing; frayed; torn.

FRAME F-85—Loose; bent, paint chipped.

Receiver-Transmitter RT-77/GRC



JACK COVERS—Missing; loose.

CALIBRATION CHART—Hard to read; mutilated.

CASE—Dented; broken, paint chipped.

RECEPTACLES—Loose; damaged; dirty; corroded.

CASE LATCHES—Missing; loose.

DIAL WINDOWS—Broken, clouded, missing.

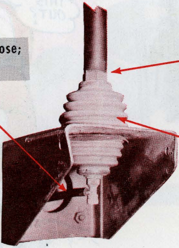
CONTROLS — Stuck; loose; hit and miss operation.

LOCKS—Don't work.

CASE—Dented; broken, paint chipped.

JACK COVERS—Missing; loose.

Antenna (For Vehicle Use)



CONNECTIONS — Loose; wires frayed.

MAST SECTIONS—Bent; paint chipped.

INSULATOR—Chipped; cracked; dirty; painted.

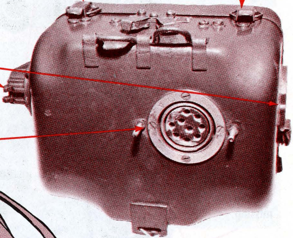
Generator GN-58

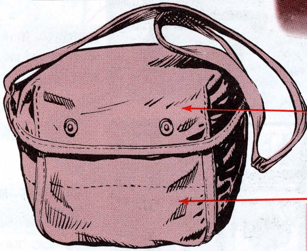
TOP COVER CLAMPS—Broken; fail to make tight connection.

THUMBSCREWS—Missing; loose; fail to tighten or loosen.

CRANK COVER PLATES—Missing; broken; bent; loose.

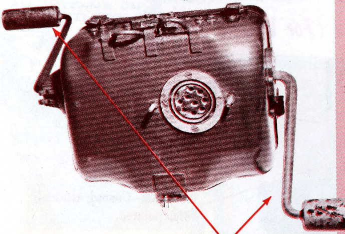
POWER OUTLET COVER—Missing; bent; broken; loose.





COVER – Spare brushes missing.

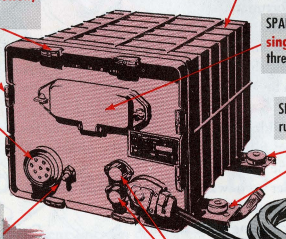
BAG—Missing; frayed; torn.



HAND CRANK— bent.

HMM WONDER IF MY GNOMES CHECKED THIS OUT?

Dymamotor-Power Supply DY-105/GRC-9X



CASE—Bent; broken; dented; paint chipped.

DZUS FASTENERS — Broken; missing.

SPARE FUSES — Missing; (three 3 amp., three 10 amp).

RECEPTACLES — Loose; damaged; dirty; corroded.

SHOCK MOUNTS — Loose; rubber cracked; dried out.

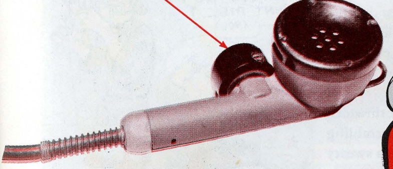
SWITCHES — Fail to make contact; loose.

FUSES—Missing; (1 Dyn. 1 Vib); improperly placed.

CABLE—Cracked; frayed; wire exposed.

Microphone T-17

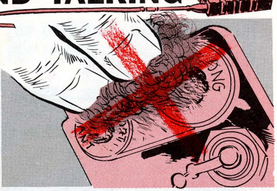
PUSH-TO-TALK-SWITCH—Fails to make contact; hit and miss operations.



CORD—Frayed; loose connection.

I MAY NOT BUY IT, BUT YOUR SIGNAL'S LOUD AND CLEAR!

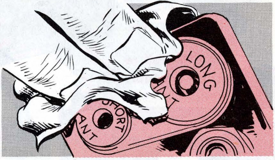
WALKING AND TALKING



Been stories told about the gent who made two mistakes takin' care of his AN/PRC-8. Unfortunate.

First, he used steel wool to scrub off the tarnish on the antenna base. And then forgot to blow the steel filings out of the holes when he was finished wool-ing around.

So the set just didn't put out when the time came for him to start talking into his "8." Tiny steel filings in the well of the antenna base had filed him away. Also filed away the mission.



Mistake number two was thinking that steel wool was the thing to use in the first place for cleaning those antenna bases. The bases are silverplated, which means any discoloration can be rubbed off with an eraser or a cloth slightly damp with cleaner.

A CLEAN TIP

Best to keep paint off the tips of your mast sections.

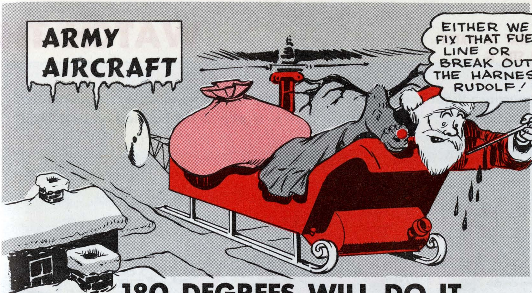
Such as MS-116-A, 117-A, 118-A, AB-22/GR and 24/GR used with the AN/GRC-3, 4, 5, 6, 7, 8 family of radios.

DERE SANTA REGARDING THAT PAINT SET YOU SENT ME... (SOB)

Not that paint isn't just what the maintenance doctor ordered for the rest of the antenna sections. It's just that the tips are sort of like movable parts—which have to be kept free of paint and even can use a drop of light oil once in a while.

Paint would only foul up the threaded part of the tips and make assembling and disassembling the sections a sweaty proposition.

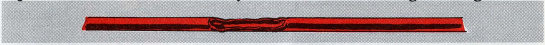
So next time your mast sections need paint, cover the subject well. But keep the tips clean.


ARMY AIRCRAFT
EITHER WE FIX THAT FUEL LINE OR BREAK OUT THE HARNESS, RUDOLF!

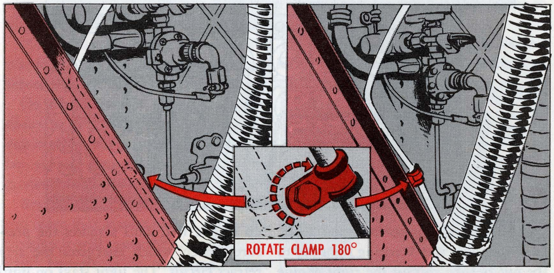
180 DEGREES WILL DO IT

Dear Editor,

The heater pump fuel vent lines on our Otters (U-1A) had a nasty habit of chaffing against the right angle chaffing strip on the engine firewall. We had to replace seven vent lines when they were found to be cut right through.



But we licked the trouble just by rotating the fuel vent line clamp 180 degrees when we put on a new line. This way the line is moved away from the chaffing strip about two inches. Haven't had any trouble since.


ROTATE CLAMP 180°

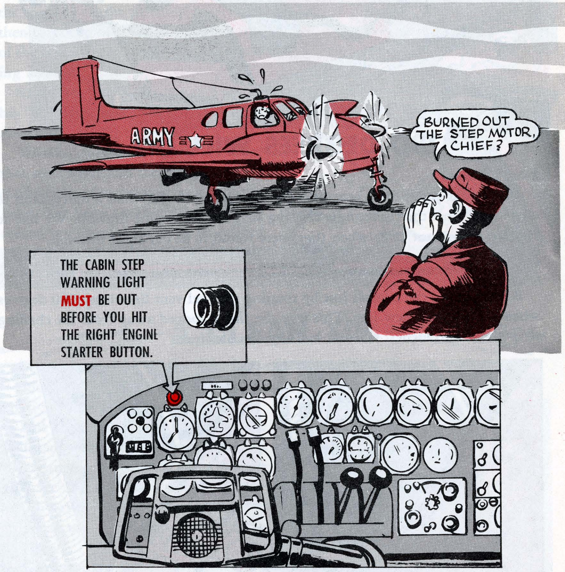
TCFM Shop
Ft Riley, Kansas

(Ed Note—Yessir, that old 180-degree turn can solve a lot of problems.)

BEST WAY TO WATCH YOUR STEP IS . . .

WATCH THE

Ignoring a flight handbook CAUTION is a good way to create a problem that didn't used to be . . . like with this here now step motor business on your Seminoles of the L-23D variety.


ARMY
BURNED OUT THE STEP MOTOR, CHIEF?
THE CABIN STEP WARNING LIGHT **MUST** BE OUT BEFORE YOU HIT THE RIGHT ENGINE STARTER BUTTON.

The —1 points out, loud and clear, that the cabin step warning light has to be out **before** you hit the right engine starter button. That's because the warning light goes on as soon as the right fuel boost pump brings fuel pressure up to five PSI. This actuates the pressure switch which energizes the step retract circuit. The light stays on until the cycle's completed—which is when the step is fully retracted into the underside of the fuselage.

BEST WAY TO WATCH YOUR STEP IS . . .

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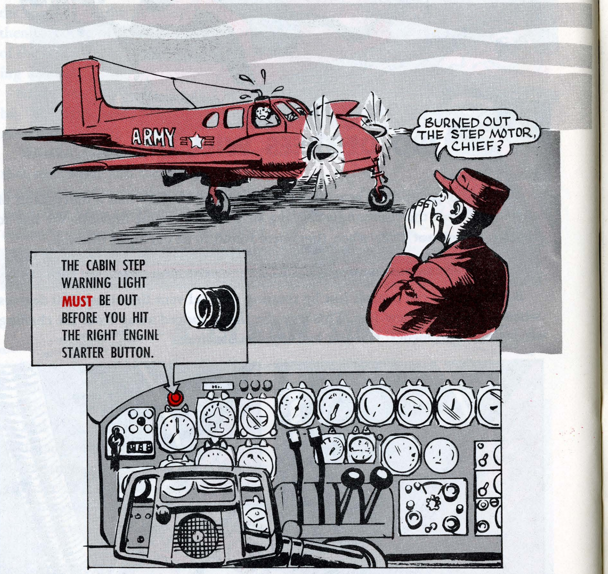
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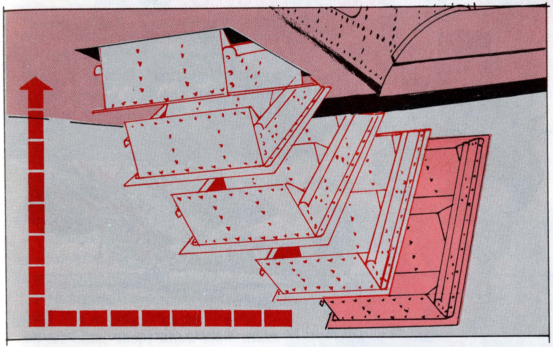
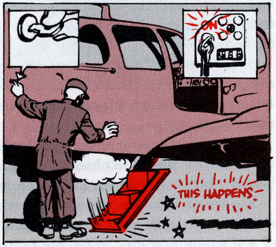


If you hit the right starter button before the cycle ends, you put an extra load on the electrical circuit while it's still operating either the step slide motor or the step rotation motor.

The heavy amperage jolt drawn by the bigger starter motor causes a voltage drop. Now, since this voltage is nothing more than the electrical driving force or power in the circuit, the resulting drop slows down the smaller step motor to where it may stall (low armature RPM).

Meanwhile, the heavy current is still flowing through the circuit. It doesn't take long to burn out the field windings in the step motor. Sometimes it happens before the step finishes its retract cycle.

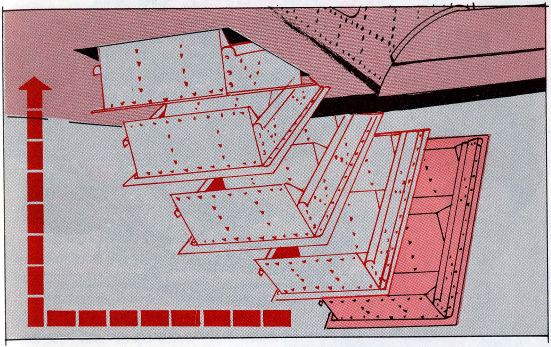


On the subject of steps, you know about the note in the —2 on stowing the step in the fuselage by using the outside key switch. Remember that the radio master switch has to be OFF first.

Even with the batteries turned off, if you leave that master switch in the ON position it will cause the aircraft's electrical harness to be energized. What happens? The automatic cycle extends the step.

Pretty tricky, huh?

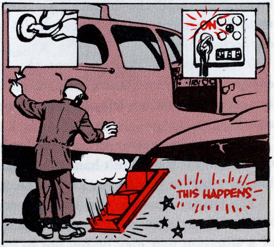
LIGHT



If you hit the right starter button before the cycle ends, you put an extra load on the electrical circuit while it's still operating either the step slide motor or the step rotation motor.

The heavy amperage jolt drawn by the bigger starter motor causes a voltage drop. Now, since this voltage is nothing more than the electrical driving force or power in the circuit, the resulting drop slows down the smaller step motor to where it may stall (low armature RPM).

Meanwhile, the heavy current is still flowing through the circuit. It doesn't take long to burn out the field windings in the step motor. Sometimes it happens before the step finishes its retract cycle.



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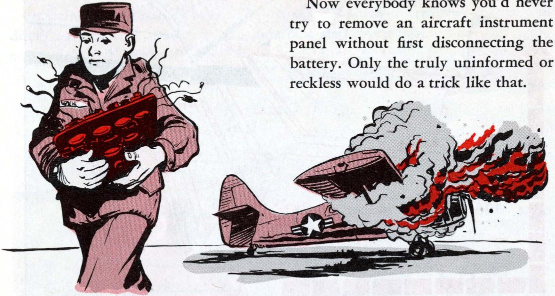
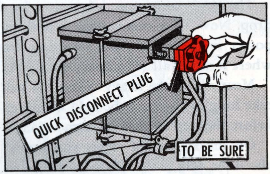
YOU CAN BE SURE IF IT'S... DISCONNECTED

Now everybody knows you'd never try to remove an aircraft instrument panel without first disconnecting the battery. Only the truly uninformed or reckless would do a trick like that.



But the word is that there still must be some of these critters around because someone sure 'nuff tried it awhile back. And naturally the panel caused a short circuit and one otherwise good Otter (U-1A) got all heated up way out of season. It took a fire extinguisher to cool things down.



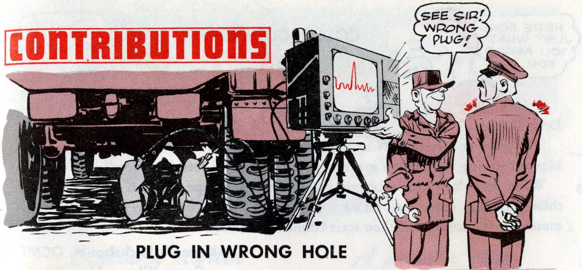
Seems it was a matter of forgetting a couple-three things about aircraft electrical systems that caused the trouble. Now the master battery switch can be turned off or on, but it won't change the fact that you **always** have juice flowing through the battery bus bar **until** the battery (or batteries) is disconnected.

In this case, the bus bar kept alive the anti-collision, stall warning, flight compartment, dome, anchor, cabin and baggage compartment lights. With the battery master switch left on, some 28 other electrically operated items are alive, too.

The batteries in your aircraft are loaded with red hot amps that can easily get out of hand if they aren't handled right. Which is why you always disconnect the batteries before you do any kind of electrical work on your birds.

The battery location and hookups are different on each aircraft but they can all be disconnected with no sweat. Just this simple little step can keep you out of a situation that may be too hot to handle.

CONTRIBUTIONS


SEE SIR! WRONG PLUG!

PLUG IN WRONG HOLE

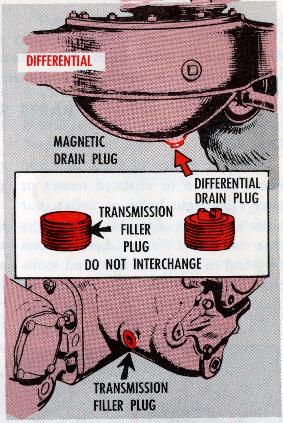
Dear Editor,

Ever hear tell of damage to the G742-series trucks from use of the wrong plug in the transmission filler-hole?

To our grief it happened here. Maybe you'd like to print this goof-up in PS and let other shops know how much this error can cost.

Nobody knows how it came about, but the truck's differential magnetic drain plug got stuck in the transmission filler-hole by mistake. The plugs look alike and are the same size (¾-in pipe plug), but the magnet strips on the differential plug reach in too far to work safely in the transmission filler-hole. The gears busted the magnet ends off and that was that for the transmission.

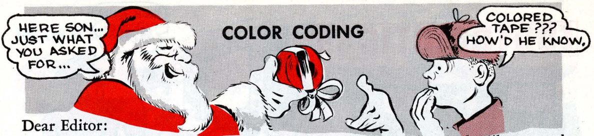
Sgt M. B.


DIFFERENTIAL
MAGNETIC DRAIN PLUG
DIFFERENTIAL DRAIN PLUG
TRANSMISSION FILLER PLUG
DO NOT INTERCHANGE
TRANSMISSION FILLER PLUG

(Ed Note—Sad tale. Two things could've hexed that guy. First, sheer neglect or ignorance on his part. Sure, the plugs look alike, but the magnet points make it easy to spot as a drain plug. Two, your supply may've thought the plugs were interchangeable and issued the wrong one for the transmission.

(The FSN for the differential magnetic plug is: FSN 4730-350-9015, plug, pipe, magnetic, sq socket, ¾ inch. If necessary for future reference, ask supply to mark this FSN "not interchangeable with transmission filler plug." FSN 4730-278-3380 will get you a flat plug for the transmission.)

COLOR CODING


HERE SON... JUST WHAT YOU ASKED FOR...
COLORED TAPE ??? HOW'D HE KNOW.

Dear Editor:

The guys at a nearby Nike site have come up with what looks like a good idea for saving time when inventorying all the tool sets they have.

What they do is pick a certain color cellophane tape for each tool set . . . and then stick that color tape on each tool in the set. Comes inventory time they match up the colors and then start counting the tools.

Kenneth Buchsbaum, OCMT
Camp Kilmer, New Jersey

(Ed. Note—If you're short of tape, try combining them—like red on one set, blue on another and red and blue on the third. Or use different designs from the same tape—squares, circles, diamonds, etc.)

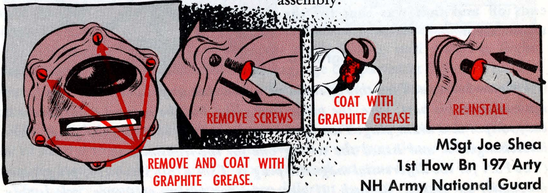
PARTS SAVER

Dear Editor,

When it comes to parts that you know have to be replaced sooner or later (like light bulbs or units), our outfit's had a lot of trouble with screws that rusted and "froze." Lots of times they had to be drilled out. And sometimes the drill would slip and chew up other expensive parts of the assembly.

To avoid damage like this, we give the screws an occasional rubdown with graphite grease.

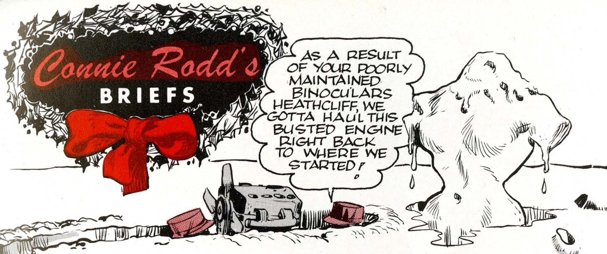
Take, f'rinstance, the screws in the waterproof tail-light assemblies of tactical vehicles. Usually we take out these screws and coat 'em with graphite grease about every six months. It makes replacing a light bulb a lot easier and sometimes saves installing a whole new assembly.


REMOVE SCREWS
COAT WITH GRAPHITE GREASE
RE-INSTALL
REMOVE AND COAT WITH GRAPHITE GREASE.

MSgt Joe Shea
1st How Bn 197 Arty
NH Army National Guard

(Ed Note—That's the kind of thinking that keeps good mechanics off the head-shrinker's couch.)

Connie Rodd's BRIEFS


AS A RESULT OF YOUR POORLY MAINTAINED BINOCULARS HEATHCLIFF, WE GOTTA HAUL THIS BUSTED ENGINE RIGHT BACK TO WHERE WE STARTED!

Stubborn starter

If you break a starter part on your stubborn M274 Mule, check its serial number. Mules with numbers from 10,001 through 10,974 (except 10,282) — and 10,954 through 10,964 — have an out-dated starter. So . . . if one breaks, ask Ordnance support for the new one described in TB 9-2320-213-35/1 (1 Apr 60).

Take it off!

How about passing word along that some .22-cal target rifles are being sent back for repair with the adjustable rear sights still on 'em? And that means the sights get banged up. The main idea is to make sure each sight is removed, cushioned and attached with tape or fine wire to the trigger guard before they're shipped out.

A powder case

The upper locking hatch on the rear door of your M44-series 155-mm SPH is something you need to keep in good shape. To make sure the locking latch stays that way, look at MWO 9-2350-203-20/3 (16 Nov 59). This urgent **MWO** tells how to do a welding job on the hold-open lock.

Lock it

When your M48A2 medium tank is rolling cross rough country, the M1 commander's cupola is a might shak-k-y position. So it might save you some trouble to make sure the azimuth lock assembly is secured. If this azimuth lock is left loose while traveling, it could cause the locking pin in the interlock assembly to bend and crack. This is so even if the interlock assembly is engaged.

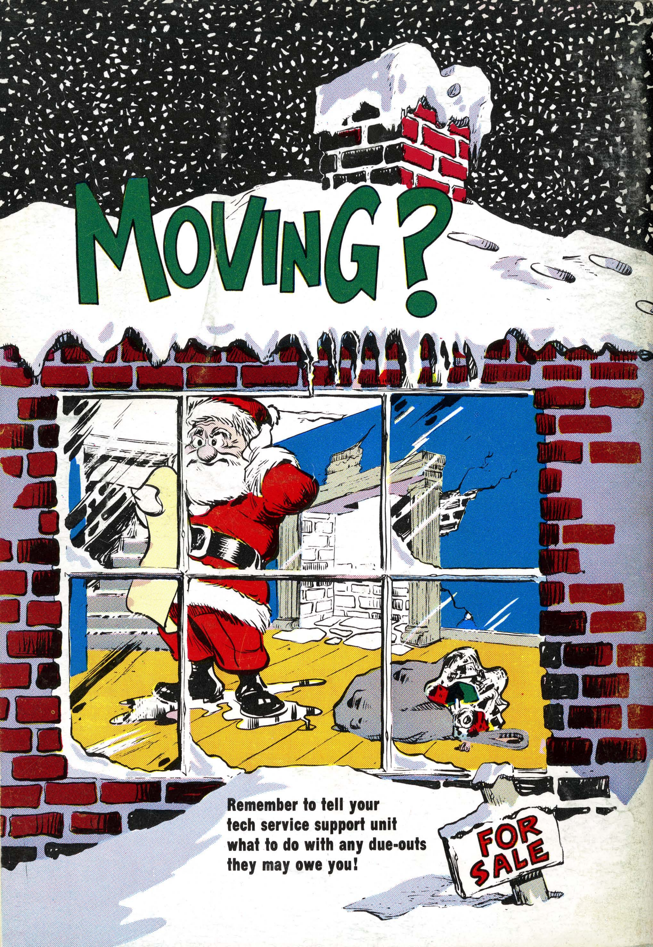
SS-10 flare

A real important safety caution you anti-tank men must remember is that the SS-10's flare won't stand still for any rough handling.

While uncrating, lifting or mounting the missile, for instance, take great care to protect it from any severe jolt or shock.

All you have to remember is that when the flare is attached you handle the SS-10 with the same respect you handle any other live ammo.

Would You Stake Your Life on the Condition of Your Equipment?



MOVING?
FOR SALE

Remember to tell your tech service support unit what to do with any due-outs they may owe you!